

AN ANNOTATED CATALOGUE OF TYPE SPECIMENS IN THE UNIVERSITY OF
ILLINOIS HERBARIUM (ILL)-- 2. PIPERACEAE CONTINUED: ARCTOTTONIA,
MANEKIA AND PEPEROMIA, PLUS SOME ADDITIONS TO PART 1 (PIPER)

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INTRODUCTION

In the introduction to part 1 of this catalogue (Jones 1985), I gave an overview of the history of our collections in the Piperaceae and included references to some of the works by William Trelease and Truman G. Yuncker. That portion, though applicable, will not be repeated here. With part 2, I have essentially completed the recording of names in this family, for which type material (including paratypes) is located at ILL. Some of our specimens of Piper are out on loan, and a few additional types may turn up upon return of that material.

The following, second part of the annotated catalogue lists 607 basionyms, including two in Arctottonia, one in Manekia, 596 in Peperomia, and eight in Piper.

The format is basically the same as in part 1 (Jones, 1985). I have retained the original spelling and endings, and cited the place of original publication for each name. If the holotype or lectotype is not located at ILL I have also, whenever available, included the conventional abbreviation of the herbarium in which the type is to be found. Depositories for isotypes and paratypes other than ILL are not given. For paratypes, I have cited only the names of collectors and collection numbers; locality data are omitted. For reasons explained in part 1, I have not made any taxonomic decisions, but I have included information on the disposition of synonyms by other authors (see References).

When necessary and feasible, I have designated lectotypes. The respective entries are marked with an asterisk. It should be noted that several of the specimens may actually be the holotypes. There are 58 such entries, and 46 of these types are at ILL. In addition, I have recorded in our herbarium 128 holotypes, 303 isotypes (including isolectotypes), 74 specimen packets with fragments of the type, four syntypes, and 285 paratypes. In a few instances, where no type was cited with the original description or indicated by the author on a specimen, I have recorded authentic specimens located at ILL that potentially could be used for lectotypification.

ANNOTATED CATALOGUE OF TYPE SPECIMENS

Arctottonia

sempervirens Trel. ex Lundell, Publ. Carnegie Inst. Wash. 436: 302. 1934 (nomen nudum), ex Standley in Standley & Record, Field Mus. Publ. Bot. 12: 405. 1936. TYPE: Guatemala, Petén, Uaxactún. 16 APR 1931. Bartlett 12563 [holotype: MICH; isotype: ILL (2 sheets)].-- [= Piper sempervirens (Trel. ex Standley) Lundell (fide Standley & Steyerl., 1952; = P. neesianum C.DC. in DC. (fide Bornstein, 1985 annotation)]

tuxpenyana Trel. ex Lundell, Publ. Carnegie Inst. Wash. 436: 311. 1934 (nomen nudum), ex Standley in Standley & Record, Field Mus. Publ. Bot. 12: 406. 1936. TYPE: Mexico, Campeche, Tuxpeña. 7 FEB 1932. Lundell 1300 (holotype: MICH; isotype: ILL).-- [= Piper yucatanense C.DC. (fide Bornstein, 1985 annotation)]

Manekia

urbani Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 313. 1927. TYPE: Haiti, La Hotte, Morne Vandervelde. El. 700 m. 1925. Ekman 5242 (holotype: ?; isotype: ILL).-- [This is the type of the generic name Manekia]

Peperomia

abbreviatis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 655, fig. 573. 1950. TYPE: Colombia. Mutis 542 (holotype: US 1560146; fragments of the type at ILL).

abnormis Trel., Ciencia (Mexico) 2: 206. 1941. TYPE: Ecuador, Archidona. 1865. Isern 1053 (holotype: MA; isotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950]

abrupte-acuteata Trel. & Yuncker var. membranacea Trel. & Yuncker, Piperaceae no. S. Amer. 2: 683. 1950. TYPE: Colombia, Santander, vicinity of California. El. 2300 m. 11-27 JAN 1927. Killip & Smith 17078, in part [holotype: US 1352727; isotype: ILL (one piece on this sheet belongs in and is a paratype of P. pennellii Trel. & Yuncker)].

aceramarcana Trel., Bull. Torrey Bot. Club 55: 169. 1928. TYPE: Bolivia, Río Aceramarca. El. 10800 ft. 1926. Tate 713 (holotype: NY; fragments of the type at ILL).-- [This species recognized by Yuncker, 1955]

- aceramaricana var. variifolia Yuncker, Lilloa 27: 199, pl. 76. [1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3727 (holotype: US 1177045; isotype: ILL).
- adsurgens Yuncker, Bol. Inst. Bot. (São Paulo) 3: 179, fig. 157. 1966. TYPE: Brazil, Rio de Janeiro, Maria Madalena. 24 MAR 1955. Pereira 1314 (holotype: RB; paratype at ILL: L.B. Smith 1885).-- [This species upheld by Yuncker, 1974]
- aerea Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 19. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1800 m. Schunke 494 (holotype: F 571552; isotype: ILL).
- aggravescens Trel. in Yuncker, Field Mus. Publ. Bot. 17: 330. 1938. TYPE: Honduras, Comayagua, Siguatepeque. El. 1800 m. 21 JUL 1936. Yuncker, Dawson & Youse 5990 (holotype: ILL; paratype at ILL: Yuncker, Dawson & Youse 6188).-- [This species recognized by Standley & Steyer., 1952]
- aguaditana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 576, fig. 500. 1950. TYPE: Colombia, Tolima, Aguadita. 15 JAN 1943. Silvano Jorge & Carlos 161 (holotype: ILL).
- aguilae Trel. & Yuncker, Piperaceae no. S. Amer. 2: 723, fig. 646. 1950. TYPE: Colombia, Tolima, El Fresno. El. 1800 m. 3 DEC 1939. García Barriga 8232 (holotype: US 1774151; paratype at ILL: Antonio Miguel 38).
- ainana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 20. 1936. TYPE: Peru, Ayacucho, Aina, near Río Apurímac. El. 750-1000 m. 7, 17 MAY 1929. Killip & Smith 22766 (holotype: US; isotype: ILL).
- * ajoupana Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited); publ. as P. stehleana var. ajoupana Trel. & Stehlé ex Stehlé & Quentin, op. cit. 2(2): 49, 50 (fig. 3). 1948 (nomen nudum, but with illustration of a leaf). TYPE: Guadeloupe. Stehlé & Stehlé 1722 (holotype, or LECTOTYPE designated herein: ILL).-- [= P. nigropunctata Miq. (fide Howard, 1973)]
- alata Ruiz & Pavón, Fl. Peruv. & Chile 1: 31, pl. 48, fig. b. 1798. TYPE: Peru, Huánuco, Pozuzo. Ruiz & Pavón s.n. [holotype: MA?; fragments of the type (obtained from MA) at ILL].-- [This species of wide distribution and generally recognized]

- alaticscapa Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 20. 1936. TYPE: Peru, Junín, Pichis Trail, Eneñas. El. 1600-1900 m. JUN-JUL 1929. Killip & Smith 25623 (holotype: US; isotype: ILL).
- albert-smithii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 495, fig. 439. 1950. TYPE: Colombia, Santander, between Piedecuesta and Las Vegas. El. 2000-2500 m. 19-24 DEC 1926. Killip & Smith 15552 [holotype: US 1351416; isotype: ILL; paratype at ILL: Killip & Smith 20442 (cited as 20422)].
- albert-smithii var. alipetiolata Trel. & Yuncker, Piperaceae no. S. Amer. 2: 496. 1950. TYPE: Colombia, Cundinamarca, Caparrapí. El. ca 1275 m. 8-13 JUN 1939. García Barriga 7732 (holotype: US 1775890; isotype: ILL; paratype at ILL: Killip 34714).
- albert-smithii var. epunctata Trel. & Yuncker, Piperaceae no. S. Amer. 2: 496, fig. 440. 1950. TYPE: Colombia, Caldas, Río Santa Rita, Salento. El. 1600-1800 m. 26 AUG 1922. Killip & Hazen 10131 (holotype: US 1142980; isotype: ILL; paratype at ILL: Ecuador: Haught 2872).
- albescens Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 299. 1940. TYPE: Panama, Coclé, vicinity of El Valle. El. 600-1000 m. 8 DEC 1938. Allen 1259 (holotype: ILL).-- [This species recognized by Yuncker, 1950]
- alleni Trel. in Woodson & Seibert, Ann. Missouri Bot. Gard. 25: 825. 1938. TYPE: Panama, Darién, Pinogana-Yavisa Trail. El. 15 m. 17 MAR 1937. Allen 262 (holotype: MO; fragments of the type at ILL).-- [= P. quadrangularis (Thompson) A. Dietr. (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1957, and 1974)]
- allorgeana Stehlé, Candollea 8: 76. 1940. TYPE: Martinique, chemin du Gros Morne. El. 700 m. 12 AUG 1939. Stehlé & Stehlé 3386 (holotype: ?; isotype: ILL).-- [= P. hirtella Miq. in Hooker (fide Howard, 1973)]
- allorgeana forma lata Trel. ex Stehlé, Fl. Descript. Antill. Fr. 2(1): 141. 1940; Bull. Agric. Martinique 9(3): 220. 1940. TYPE: Martinique, Gros-Morne lane. El. 620-700 m. 12 AUG 1939. Stehlé & Stehlé 3389 (holotype: ILL; paratype at ILL: Stehlé & Stehlé 3388).-- [= P. hirtella (fide Howard, 1973)]

- allorgeana forma major Trel. ex Stehlé, Fl. Descript. Antill. Fr. 2(1): 140. 1940; Bull. Agric. Martinique 9(3): 217. 1940. TYPE: Martinique, Deux-Choux. El. 700 m. 26 APR 1939. Stehlé & Stehlé 3211 (holotype: ILL; paratype at ILL: Stehlé & Stehlé 3254).-- [= P. hirtella (fide Howard, 1973)]
- allorgeana forma minor Trel. ex Stehlé, Fl. Descript. Antill. Fr. 2(1): 140. 1940; Bull. Agric. Martinique 9(3): 217. 1940. TYPE: Martinique, Deux-Choux. El. 580-680 m. 12 AUG 1939. Stehlé & Stehlé 3390 (holotype: ILL; paratype at ILL: Stehlé & Stehlé 3391).-- [= P. hirtella (fide Howard, 1973)]
- alternifolia Yuncker, Bernice P. Bishop Mus. Bull. 112: 24. 1933. TYPE: Hawaii, Molokai, Mapulehu Valley. Forbes 302-MO [holotype: BISH; paratypes at ILL: Degener 3065 and 3069 (leg. Wiebke), 3185 and 3186 (leg. Wiebke & Nitta)].-- [This species recognized by Kartesz & Kartesz, 1980]
- alveolata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 324, 331. 1927. TYPE: Santo Domingo [Dominican Republ.]. JAN-MAR 1871. Wright, Parry & Brummel 514 [holotype: US 209801; paratypes at ILL (from Haiti): Ekman 1797, 4607; Leonard 8328].
- ambiguifolia Trel. & Yuncker, Piperaceae no. S. Amer. 2: 571, fig. 495. 1950. TYPE: Colombia, Santander, Río Servitá, between Málaga and Concepción. El. 2100-2300 m. 19 JUL 1940. Cuatrecasas & García Barriga 9867 (holotype: US 1799090; isotype: ILL).
- amnicola Trel. in Yuncker, Field Mus. Publ. Bot. 17: 330. 1938. TYPE: Honduras, Comayagua, on a tree, river bank near Siguatepeque. El. 1050 m. JUN-AUG 1936. Yuncker, Dawson & Youse 5799 (holotype: ILL).
- * amphioxys Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 24. 1931. TYPE: Santo Domingo [Dominican Republ.], Río Ozoma, Santo Domingo City. 13 JAN 1929. Ekman 11133 (holotype, or LECTOTYPE designated herein: ILL).
- amphitricha Trel., Contr. U.S. Nat. Herb. 26(4): 192. 1929. TYPE: Costa Rica, San José, Quebradillas, N of Santa María de Dota. El. 1800 m. 24 DEC 1925. Standley 43089a (holotype: US 1251160; isotype: ILL).-- [This species recognized by Burger, 1971]
- amphitricha var. santa-rosana Trel., Contr. U.S. Nat. Herb. 26(4): 192. 1929. TYPE: Costa Rica, San José, Santa Rosa de Copey. Tonduz 12225 (holotype: G-DC; paratype at ILL: Standley 42620).-- [Cited with the species by Burger, 1971]

- amphoterophylla Trel., Contr. U.S. Nat. Herb. 26(4): 225. 1929.
TYPE: Costa Rica, San José, La Palma. JUL 1888.
Biolley 939 (holotype: US 796599; paratype at ILL:
Standley 41609).-- [= P. galioides Kunth (fide Burger,
1971)]
- amphoterophylla var. glutineofructa Trel., Contr. U.S. Nat.
Herb. 26(4): 226. 1929. TYPE: Costa Rica, San José, Cerro
de las Vueltas. El. 2700-3000 m. 29 DEC 1925-1 JAN 1926.
Standley & Valerio 44007 (holotype: US 1251182; isotype:
ILL; paratypes at ILL: Standley 42166, 42234, 43059, 43090;
Standley & Valerio 43527).-- [= P. galioides (fide Burger,
1971)]
- aneura Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2:
601, fig. 525. 1950. TYPE: Colombia, Goajira, 15 km SW of
Carraipia. El. 750 m. 26 AUG 1944. Haught 4320 (holotype:
US 1709286; isotype: ILL).
- antoni Trel. in Woodson & Seibert, Ann. Missouri Bot. Gard. 24:
185. 1937. TYPE: Panama, Coclé, El Valle de Antón and
vicinity. El. 500-700 m. 23-27 JUL 1935. Seibert 437
(holotype: MO; isotype: ILL).-- [= P. magnoliifolia
(Jacquin) A. Dietr. (fide Trel. & Yuncker, 1950; Yuncker,
1950, 1957, 1966 and 1974)]
- antoni forma fertilior Trel. in Woodson & Schery, Ann. Missouri
Bot. Gard. 27: 299. 1940. TYPE: Panama, Coclé, vicinity of
El Valle. El. 800-1000 m. 5 SEP 1938. Allen 760
(holotype: ILL).-- [= P. magnoliifolia (fide Trel. &
Yuncker, 1950; Yuncker, 1950 and 1974)]
- antoni forma lutea Trel. in Woodson & Schery, Ann. Missouri
Bot. Gard. 27: 300. 1940. TYPE: Panama, Coclé, vicinity of
El Valle. El. 600-1000 m. 8 DEC 1938. Allen 1160
(holotype: ILL).-- [= P. magnoliifolia (fide Trel. &
Yuncker, 1950; Yuncker, 1950, 1957, 1966 and 1974)]
- antoni var. reducta Trel. in Woodson & Schery, Ann. Missouri
Bot. Gard. 27: 299. 1940. TYPE: Panama, Coclé, vicinity of
El Valle. El. 600-1000 m. 8 DEC 1938. Allen 1222
(holotype: ILL).-- [= P. obtusifolia (L.) A. Dietr. (fide
Trel. & Yuncker, 1950; Yuncker, 1950, 1955, 1957 and 1974)]
- antoniana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 21. 1936. TYPE: Peru, Loreto, Río Itaya, San
Antonio. El. 110 m. 18 SEP 1929. Killip & Smith 29496
(holotype: US; isotype: ILL).

apodophylla Trel. & Yuncker var. hirtella Trel. & Yuncker, Piperaceae no. S. Amer. 2: 581. 1950. TYPE: Colombia, Santander, Río Suratá valley, between Bucaramanga and El Jaboncillo. El. 800-1500 m. 2 JAN 1927. Killip & Smith 16352 (holotype: GH; isotype: ILL).

apodostachya Yuncker, Lilloa 27: 251, pl. 128. [1953] 1955. TYPE: Bolivia, La Paz, San Carlos, near Mapiri. El. 850 m. 17 DEC 1926. Buchtien 627 (holotype: US 1399490; isotype: ILL).

appellator Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 300. 1940. TYPE: Panama, Chiriquí, vicinity of Casita Alta, Volcán de Chiriquí. El. 1500-2000 m. JUN-JUL 1938. Woodson, Allen & Seibert 816 (holotype: ILL).--
[= P. leucosticta Trel. (fide Yuncker, 1950)]

* apurimacana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 22. 1936. TYPE: Peru, Ayacucho, Carrapa, between Huanta and Río Apurímac. El. ca 1500 m. MAY 1929. Killip & Smith 22355 (LECTOTYPE, designated herein: ILL).

arctebaccata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 23. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1000 m. Schunke 471 (holotype: F 571529; fragment of the type at ILL).

arcuatispica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 23. 1936. TYPE: Peru, Junín, Pichis Trail, San Nicolás. El. 1100 m. Killip & Smith 25992 (holotype: US; isotype: ILL).

areolata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 23. 1936. TYPE: Peru, Loreto, Balsapuerto. El. 150-350 m. Killip & Smith 28660 [holotype: US; fragment of the type (a single leaf) at ILL].

argumentosa Trel. in Yuncker, Field Mus. Publ. Bot. 17: 331. 1938. TYPE: Honduras, Comayagua, on a log in ravine near El Achote, above Siguatepeque. El. 1350 m. 19 JUL 1936. Yuncker, Dawson & Youse 5966 (holotype: ILL).

artatiflora Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 23. 1936. TYPE: Peru, Junín, Palca. 6 DEC 1924. Stevens 47 (holotype: ILL).

* aspergillus Trel., Trab. Mus. Nac. Ci. Nat., Ser. Bot. 33: 45. 1936 (without a Latin diagnosis). TYPE: Colombia, Caldas, New Quindío Trail. 14 AUG 1922. Killip 9787 (LECTOTYPE, designated herein: US 1142908; isolectotype: ILL).--
[= P. saligna Kunth (fide Trel. & Yuncker, 1950)]

- asterophylla Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 24. 1936. TYPE: Peru, Loreto, Santa Rosa. El. 135 m. 1-5 SEP 1929. Killip & Smith 28909 (holotype: US; isotype: ILL).
- * auberyana Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 [nomen nudum, but type cited: = Stehlé & Stehlé 1723 (not at ILL)]; validly published in op. cit. 2(2): 57. 1948, with a different type citation!. TYPE: Guadeloupe, Santa Rosa. 13 JAN 1937. Aubery 1622 (LECTOTYPE, designated herein: NY; isolectotype: ILL).-- [= P. myrtifolia (Vahl) A. Dietr. (fide Howard, 1973)]
- baileyae Trel. ex Standley, Contr. Arnold Arbor. 5: 53. 1933. TYPE: Panama, Canal Zone, Barro Colorado Island. Bailey & Bailey 84 (holotype: ?; isotype: ILL).-- [= P. obscurifolia C.DC. (fide Yuncker, 1950 and Croat, 1978)]
- bajana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 581. 1950. TYPE: Colombia, Santander, vicinity of La Baja. El. 3500 m. 14-31 JAN 1927. Killip & Smith 18091 (holotype: US 1353562; isotype: ILL).
- balineorum Trel. ex Stehlé, Bull. Soc. Bot. France 84: 408. 1937 (without a Latin diagnosis); Candollea 8: 80. 1940. TYPE: Guadeloupe, Forêt des Bains-Jaunes. El. 650 m. Stehlé & Stehlé 230 [holotype: ?; paratype at ILL: Quentin 1336 (cited in 1937)].-- [= P. nigropunctata (fide Howard, 1973)]
- balneolorum Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited). TYPE: Guadeloupe, Bains-Jaunes. 1 JAN 1937. Stehlé 1348 (leg. Quentin) (holotype: ?; isotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- barbensis Trel. var. alajuelana Trel., Contr. U.S. Nat. Herb. 26(4): 191. 1929. TYPE: Costa Rica, Alajuela, Fraijanes. El. 1500-1700 m. 12-13 FEB 1926. Standley & Torres 47695 (holotype: US 1251258; isotype: ILL; paratype at ILL: Standley & Valerio 43769).-- [= P. hispidula (Sw.) A. Dietr. (fide Burger, 1971)]
- bayajana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 17, 24. 1926. TYPE: Cuba, Oriente, Sierra Maestra near Bayajá. El. ca 900 m. 8 AUG 1922. Ekman 14779 [holotype: ?; isotype: ILL (2 sheets)].-- [= P. grisebachii C.DC. (fide Yuncker, 1950-51)]

- bayatana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 22, 30. 1926. TYPE: Cuba, Oriente, Bayate. 20 NOV 1915. Ekman 6639 (holotype: ?; fragments of the type at ILL).--
[= P. obtusifolia (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1955, 1957 and 1974)]
- bella Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 690, fig. 606. 1950. TYPE: Colombia, Antioquia, on Río Guapá, 8 km E of Guapá, etc. El. ca 150 m. 10 MAY 1945. Haught 4656 (holotype: US 1709197; isotype: ILL).
- bella var. subcordata Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 691, fig. 607. 1950. TYPE: Colombia, Chocó, Cupica. El. ca 100 m. 10 FEB 1947. Haught 5557 (holotype: US 1709502; isotype: ILL).
- bellatula Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 478, fig. 420. 1950. TYPE: Colombia, Antioquia, near Río Guapá, about 9 km E of Guapá, etc. El. ca 150 m. 10 MAY 1945. Haught 4657 (holotype: US 1709198; isotype: ILL).
- bermudezana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13 (No. 357): 25. 1936. TYPE: Peru, Junín, Puerto Bermúdez. El. 375 m. 14-17 JUL 1929. Killip & Smith 26451 (holotype: US; isotype: ILL).
- bethaniana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 612, fig. 536. 1950. TYPE: Colombia, Cundinamarca, Finca Bethania, below Peña Negra, Mun. Anolaima. El. 2700 m. 29 MAY 1941. García Barriga & Jaramillo 10420 (holotype: US 1851536; isotype: ILL).
- blanda (Jacquin) Kunth var. sericea Yuncker in Espinosa, Univ. Loja Estud. Bot. Ecuador 2: 31. 1949 (nomen nudum), in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 559. 1950. TYPE: Ecuador, Loja, El Valle, 2 km NE of Loja. El. 2100 m. 6 MAR 1947. Espinosa 1361 (holotype: ILL; paratype at ILL: Espinosa 90).
- blepharilepida Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 319, 326. 1927. TYPE: Haiti, Chapelle Faure. 18 AUG 1924. Ekman 1529 (holotype: ?; isotype: ILL).
- blephariphylla Trel. & Yuncker, Piperaceae no. S. Amer. 2: 665, fig. 580. 1950. TYPE: Colombia, Chocó, Río San Juan, near Palestina. El. 5-50 m. 12-14 MAR 1944. Cuatrecasas 16930 (holotype: US 1852543; isotype: ILL; paratypes at ILL: Haught 5379; Killip & Cuatrecasas 38762, 38876; Killip & García 33231, 33384).

blepharipus Trel. in J.F. Macbr., Field Mus. Publ. Bot.

13(No. 357): 25. 1936. TYPE: Peru, Loreto, Yurimaguas.

El. 135 m. AUG-SEP 1929. Killip & Smith 28030 (holotype: US; isotype: ILL).

blepharipus var. binispica Trel. in J.F. Macbr., Field Mus.

Publ. Bot. 13(No. 357): 25. 1936. TYPE: Peru, Loreto, San Antonio, Alto Río Itaya. El. 145 m. SEP-OCT 1929.

Williams 3435 (holotype: F 618141; isotype: ILL).

* blepharipus var. iquitosensis Trel. in J.F. Macbr., Field Mus.

Publ. Bot. 13(No. 357): 26. 1936. TYPE: Peru, Loreto,

Iquitos. El. 100 m. 3-11 AUG 1929. Killip & Smith 27462 (LECTOTYPE, designated herein: ILL).

bocasensis Trel. in Woodson & Schery, Ann. Missouri Bot. Gard.

27: 300. 1940. TYPE: Panama, Bocas del Toro, vicinity of

Nievecita. El. 0-50 m. 8-19 AUG 1938. Woodson, Allen & Seibert 1859 (holotype: ILL).-- [This species recognized by Yuncker, 1950; = P. emiliana C.DC. (fide Burger, 1971)]

* bopiana Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 227. 1927.

TYPE LOCALITY: Bolivia, La Paz, Bopi River, at 3000 ft.

AUG 1921. Rusby 387, 570 = SYNTYPES (both at ILL).--

[Yuncker (1955) recognized this species and cited Rusby 387 as the "type"; Trelease, however, wrote "Type" on the other specimen: Rusby 570. The latter number therefore should be regarded as the HOLOTYPE (or LECTOTYPE). According to Yuncker, that collection belongs in P. rhombea Ruiz & Pavón, as do several other specimens annotated by Trelease as "P. bopiana". Comparison of Rusby 387 with the other authentic specimens shows that the material is conspecific, i.e., P. bopiana Trel. in Rusby, as well as P. bopiana sensu Yuncker (1955) belong in synonymy under P. rhombea]

brachyiula Trel. in J.F. Macbr., Field Mus. Publ. Bot.

13(No. 357): 26. 1936. TYPE: Peru, Matucana. El. 2400 m.

APR-MAY 1922. Macbride & Featherstone 129 (holotype: F 516662; isotype: ILL).

bracteispica Trel. in J.F. Macbr., Field Mus. Publ. Bot.

13(No. 357): 26. 1936. TYPE: Peru, Huánuco, Huacachi, near

Muña. El. 1950 m. MAY-JUN 1923. Macbride 4171a (holotype: F 551173; fragments of the type at ILL).

brevihirtella Yuncker, Bol. Inst. Bot. (São Paulo) 3: 155, fig.

140. 1966. TYPE: Brazil, Minas Gerais, Faz. do Diamante,

Olhos de Água. 1 APR 1931. Mexia 5508 (holotype: US 1618128; isotype: ILL).-- [This species upheld by Yuncker, 1974]

brevipeduncula (C.DC.) Trel. var. major Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 301. 1940. TYPE: Panama, Prov. Panamá, Río Las Lajas. El. ca 20 m. 19 NOV 1939. Allen 2037 (holotype: ILL).-- [= P. pseudo-dependens C.DC. (fide Trel. & Yuncker, 1950 and Yuncker, 1950)]

brouetiana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 321, 328. 1927. TYPE: Haiti, Morne Brouet. 30 JUL 1924. Ekman 1197 (holotype: ?; isotype: ILL).

- * buchii C.DC. in Urban var. macrostachya Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 321, 329. 1927. TYPE: Haiti, La Selle, Rivière Momence, Nouvelle Touraine. El. 1000 m. 17 AUG 1924. Ekman 1516 (holotype, or LECTOTYPE designated herein: ILL).

buchtienii Yuncker, Lilloa 27: 241, pl. 118. [1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3747 [holotype: US 1176607; paratypes at ILL: Buchtien 3745, 3746, 5380, 7249; Cárdenas 1335a (fragments)].

cabaiana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 321, 328. 1927. TYPE: Haiti, La Selle, Morne Cabaio. El. 1900 m. 24 AUG 1924. Ekman 1590 (holotype: ?; isotype: ILL).

cacaophila Trel. & Yuncker, Piperaceae no. S. Amer. 2: 610, fig. 534. 1950. TYPE: Ecuador, Los Rios, roadside at Quevedo. El. ca 350 m. 22 NOV 1939. Haught 2966 (holotype: US 1707621; isotype: ILL).

caducipilosa Trel. in Yuncker, Field Mus. Publ. Bot. 17: 331. 1938. TYPE: Honduras, Lancetilla Valley, epiphytic on tree near Lancetilla. El. 30 m. 12 JUL 1934. Yuncker 4544 (holotype: ILL).

caespitiformans Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited), ex Stehlé, Candollea 8: 77. 1940. TYPE: Guadeloupe, Malanga. El. 680 m. Stehlé & Stehlé 1753 (holotype: NY; fragments of type at ILL).-- [= P. trifolia (L.) A. Dietr. (fide Howard, 1973)]

caliginigaudens Trel. & Yuncker, Piperaceae no. S. Amer. 2: 695, fig. 614. 1950. TYPE: Ecuador, Napo-Pastaza ... trail from Mera to Baños. El. ca 470 m. 23 FEB 1935. Mexia 6969 (holotype: US 1619094; isotype: ILL).

- calimana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 617, fig. 541. 1950. TYPE: Colombia, El Valle, "Calima" on Río Calima. 14-15 SEP 1922. Killip 11225 (holotype: GH; isotype: ILL; paratype at ILL: Haught 2542).-- [This species recognized by Yuncker, 1955a]
- calophylla Yuncker, Bol. Inst. Bot. (São Paulo) 3: 140, fig. 124. 1966 [as callophylla]. TYPE: Brazil, Paraná, Serra do Mar, Cadeado. 4 NOV 1915. Dusén 17295 (holotype: US 1481730; isotype: ILL).-- [This species upheld by Yuncker, 1974]
- calvescens Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 27. 1936. TYPE: Peru, Huánuco, Cueva Grande, near Pozuzo. El. 1050 m. 23 JUN 1923. Macbride 4800 (holotype: F 535834; isotype: ILL).
- canaminana Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 288. 1927. TYPE: Bolivia, Canamina. El. 4000 ft. 21 JUL 1921. White 515 [holotype: ILL (this specimen marked "Type" by Trelease); paratypes at ILL: White 282 (this number cited as the type by Yuncker, 1955), 513 (a different species)].-- [This species recognized by Yuncker, 1955.-- White 513 belongs in P. aceroana C.DC. (fide Yuncker)]
- cangrejalana Trel. in Yuncker, Field Mus. Publ. Bot. 9(4): 274. 1940. TYPE: Honduras, Atlántida, lower slopes of Mt. Cangrejal near La Ceiba. 2 AUG 1938. Yuncker, Koepfer & Wagner 8765 (holotype: ILL).
- caniana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 27. 1936. TYPE: Peru, Huánuco, Cani, near Mito. El. 2550 m. 16-26 APR 1923. Macbride 3415 (holotype: F 534486; isotype: ILL).
- capitis-bovis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 323, 330. 1927. TYPE: Haiti, Aux Cayes, Mt. Tête de Boeuf. El. 1100 m. Ekman 781 [holotype: ?; fragment of the type (1 leaf) at ILL].
- cardenasii Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 227. 1927. TYPE: Bolivia, Beni, Rurrenabaque. El. 300 m. 25 NOV 1921. Cárdenas 1174 (holotype: ILL).-- [This species recognized by Yuncker, 1955]
- carlo-wrightii Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 16, 23. 1926. TYPE: eastern Cuba. "Oct. 8" and "Febr. 7". Wright (holotype: W; paratypes at ILL: Ekman 2026, 6900).-- [= P. quadrangularis (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1953, 1957 and 1974)]

- carpapatana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 27. 1936. TYPE: Peru, Junín, Carpapata. El. 2700-3200 m. 7 JUN 1929. Killip & Smith 24438 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 24393).
- carrapana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 28. 1936. TYPE: Peru, Ayacucho, Carrapa. El. 1500 m. MAY 1929. Killip & Smith 23207 (holotype: US; isotype: ILL).
- cartagoana Trel., Contr. U.S. Nat. Herb. 26(4): 222. 1929. TYPE: Costa Rica, San José. Pittier 3198 (holotype: ?; paratypes at ILL: Standley 41456, 42785; Standley & Valerio 49514, 49624).-- [= P. tetraphylla (G. Forster) Hooker & Arnott (cf. Burger, 1971)]
- casitana Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 301. 1940. TYPE: Panama, Chiriquí, vicinity of Casita Alta, Volcán de Chiriquí. El. 1500-2000 m. JUN-JUL 1938. Woodson, Allen & Seibert 952 (holotype: ILL).-- [= P. adscendens C.DC. (fide Trel. & Yuncker, 1950 and Yuncker 1950; = P. acuminata Ruiz & Pavón (fide Burger, 1971)]
- castelosensis Yuncker, Bol. Inst. Bot. (São Paulo) 3: 156, fig. 141. 1966. TYPE: Brazil, Rio de Janeiro, Serra dos Órgãos, Castelos. El. 2000 m. 19-20 MAR 1932. Brade 11538 [holotype: R; paratypes at ILL: Hoehne s.n. (= SP 8664); Zickan s.n. (= SP 5385)].-- [This species upheld by Yuncker, 1974]
- cataractaegaudens Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited); Trel. ex Stehlé, Fl. Descript. Antill. Fr. 2(1): 144. 1940; Bull. Agric. Martinique 9(3): 221. 1940. TYPE: Guadeloupe, Bord de la chute du Grand Carbet. El. 1000 m. 17 JAN 1937. Stehlé & Stehlé 1625 (holotype: NY; fragments of the type at ILL).-- [= P. hirtella (fide Howard, 1973)]
- cattii Trel. in Standley, Field Mus. Publ. Bot. 18(1): 310. 1937. TYPE: Costa Rica, Limón, margin of Bonilla Lakes above Tunnel Camp. El. 300-430 m. 13 DEC 1929. Dodge, Catt & Thomas 6141 (holotype: GH; isotype: ILL).-- [= P. glabella (Sw.) A. Dietr. (fide Burger, 1971)]
- cerea Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 28. 1936. TYPE: Peru, Huánuco, Mito. El. 2700 m. Macbride 3330 (holotype: F 534400; isotype: ILL).

- cerro-puntana Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 301. 1940. TYPE: Panama, Chiriquí, trail from Cerro Punta to headwaters of Río Caldera. El. 2250-2500 m. 14 JAN 1939. Allen 1451 (holotype: ILL).-- [This species recognized by Yuncker, 1950; = P. amphitricha (fide Burger, 1971)]
- chachopoana Trel. ex Badillo, Cat. Fl. Venezolana 1: 244. 1945 (nomen nudum). TYPE: Venezuela, Mérida, above Chachopo. 16 JAN 1929. Pittier 13165 (holotype: ?; fragments of the type at ILL).-- [= P. microphylla Kunth (fide Trel. & Yuncker, 1950)]
- chalhuapuquiana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 29. 1936. TYPE: Peru, Junín, Hacienda Chalhuapuquio. 8 DEC 1924. Stevens 215 (holotype: ILL).
- chartacea Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 30. 1936. TYPE: Peru, Junín, Puerto Bermúdez. El. 375 m. 14-17 JUL 1929. Killip & Smith 26636 (holotype: US; isotype: ILL).
- chicamochana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 470, fig. 411. 1950. TYPE: Colombia, Boyacá, Río Chicamocha Valley, between Soata and Tipacoque. El. 1700-2000 m. 18 JUL 1940. Cuatrecasas & García Barriga 9822 [holotype: US 1798144; paratype at ILL: Cuatrecasas 1122 (small piece)].
- chicbulana Trel. in Standley, Field Mus. Publ. Bot. 17: 230. 1937. TYPE: Guatemala, Petén, on a tree trunk in high, mesophytic forest of Monte Chicbul, near La Libertad. 29 APR 1933. Lundell 3099 (holotype: MICH; isotype: ILL).-- [= P. granulosa Trel. (fide Standley & Steyererm., 1952)]
- chillonensis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 30. 1936. TYPE: Peru, Lima, along Río Chillón, above Obrajillo. El. 2800-3200 m. Pennell 14413 (holotype: F 558460; fragments of the type at ILL).
- chiqueroana Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 301. 1940. TYPE: Panama, Chiriquí, Bajo Mona, mouth of Quebrada Chiquero, Río Caldera. El. 1500-2000 m. 3 JUL 1938. Woodson, Allen & Seibert 1025 (holotype: ILL).-- [= P. barbinodis Trel. (fide Burger, 1971 and Yuncker, 1950)]
- chiriquiensis Yuncker, Ann. Missouri Bot. Gard. 37: 93. 1950. TYPE: Panama, Chiriquí, above Camp I, Holcomb's Trail, above El Boquete. El. 1800-2100 m. 18 FEB 1918. Killip 3564 (holotype: US; isotype: ILL).

- chlorostachya Trel., Contr. U.S. Nat. Herb. 26(4): 203. 1929.
TYPE: Costa Rica, San José, Cerro de las Vueltas.
El. 2700-3000 m. 29 DEC 1925-1 JAN 1926. Standley & Valerio 43513 (holotype: US 1251176; isotype: ILL; paratype at ILL: Standley 42766).-- [= P. hylophila C.DC. (fide Burger, 1971)]
- chromatogena Yuncker, Lilloa 27: 278, pl. 159. [1953] 1955.
TYPE: Bolivia, La Paz, Hacienda Simaco, along the road to Tipuani. El. 1400 m. MAR 1920. Buchtien 5382 (holotype: US 1176984; paratypes at ILL: Buchtien 3718, 7251, 7252, 7253).
- chryseri Yuncker, Ann. Missouri Bot. Gard. 37: 94. 1950.
TYPE: Panama, Canal Zone, Barro Colorado Island.
29 JUN 1940. Chryser & Roever 4797 (holotype: ILL).-- [= P. obscurifolia (fide Croat, 1978)]
- chrysolepida Trel. ex I.M. Johnston, Proc. Calif. Acad. Sci. 20: 57. 1931. TYPE: Mexico, Socorro Island. 1903.
Barkeley 228 (holotype: US 3999023; fragments of the type at ILL; paratype at ILL: Mason 1629).
- chucanebana Trel. in Standley, Field Mus. Publ. Bot. 10: 156. 1931. TYPE: not cited, presumably from Honduras, perhaps to be lectotypified (authentic specimen from Honduras at ILL: Standley 55244).-- [This species recognized by Yuncker, 1938; = P. deppeana Schlecht. & Cham. (cf. Standley & Steyerf., 1952)]
- ciliatifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 30. 1936. TYPE: Peru, Loreto, Balsapuerto. El. 150-350 m. 28-30 AUG 1929. Killip & Smith 28684 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 27982).
- ciliatifolia var. eciliatifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 31. 1936. TYPE: Peru, Loreto, Santa Rosa. El. 135 m. Killip & Smith 28723 [holotype: US; fragment of the type (a single leaf) at ILL].
- ciliatifolia var. iquitosana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 31. 1936. TYPE: Peru, Loreto, Iquitos. El. ca 100 m. 3-11 AUG 1929. Killip & Smith 27167 (holotype: US; isotype: ILL).
- ciliatifolia var. santarosana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 31. 1936. TYPE: Peru, Loreto, Santa Rosa. El. 135 m. 1-5 SEP 1929. Killip & Smith 28988 (holotype: US; isotype: ILL).

circinnata Link, Bot. Jahrb. 1(3): 64. 1820. TYPE: Brazil.
Pohl 1217 (holotype: W; fragments of the type at ILL).--
[This species recognized by Yuncker, 1957 and 1974]

circulifolia Trel. in Yuncker [var. circulifolia], Field Mus.
Publ. Bot. 17: 331. 1938. TYPE: Honduras, Comayagua,
... near El Achote, above the plains of Siguatepeque.
El. 1350 m. 7 AUG 1936. Yuncker, Dawson & Youse 6361
(holotype: ILL).-- [= P. quadrifolia (L.) Kunth (fide
Standley & Steyerl., 1952)]

circulifolia var. eciliata Trel. in Yuncker, Field Mus. Publ.
Bot. 17: 332. 1938. TYPE: Honduras, Comayagua, ... near El
Achote, hills above the plains of Siguatepeque. El. 1350 m.
7 AUG 1936. Yuncker, Dawson & Youse 6360 (holotype:
ILL).-- ["the leaves are not ciliated and the plants are
larger." (quote from the label)]

circulifolia var. flava Trel. in Yuncker, Field Mus. Publ. Bot.
17: 331. 1938. TYPE: Honduras, Comayagua, ... near El
Achote, hills above the plains of Siguatepeque. El. 1350 m.
15 JUL 1936. Yuncker, Dawson & Youse 5869 (holotype:
ILL).-- ["Leaves thick and turgid, emarginate." (quote from
the label)]

clavatispica Trel. & Yuncker, Piperaceae no. S. Amer. 2: 477,
fig. 419. 1950. TYPE: Colombia, Caldas, Quebrada Pontoná,
ca 18 km W of La Dorada. El. ca 400 m. 30 DEC 1936.
Haught 2133 (holotype: US 1742378; isotype: ILL).

clivicola Yuncker, Bol. Inst. Bot. (São Paulo) 3: 158, fig.
142. 1966. TYPE: Brazil, Rio de Janeiro, Itatiaia.
18 JUL 1902. Dusén 763 (holotype: R; isotype: ILL).-- [This
species upheld by Yuncker, 1974]

cocleana Trel. in Woodson & Seibert, Ann. Missouri Bot. Gard.
25: 826. 1938. TYPE: Panama, Coclé, upper Río Mata Ahogado
Valley. El. 350 m. 31 DEC 1936. Allen 133 (holotype:
ILL).-- [This species recognized by Yuncker, 1950]

coliblancoana Trel. in Standley, Field Mus. Publ. Bot. 18(4):
311. 1937. TYPE: Costa Rica, Cartago, Finca Coliblanco,
S slope of Volcán de Turrialba. El. 1980 m. 11 OCT 1929.
Dodge 4516 (holotype: GH; isotype: ILL).-- [= P. tenella
(Sw.) A. Dietr. (fide Burger, 1971)]

- * collicola Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 24.
1931. TYPE: Santo Domingo [Dominican Republ.], Azua, dry
hill W of S. José de Ocoa. El. 700 m. 25 FEB 1929. Ekman
11665 (holotype, or LECTOTYPE designated herein: ILL).

collocata Trel. in Yuncker, Field Mus. Publ. Bot. 17: 332.
1938. TYPE: Honduras, Comayagua, ... near El Achote, hills
above Siguatepeque. El. 1350 m. 26 JUL 1936. Yuncker,
Dawson & Youse 6106 (holotype: ILL).-- [This species
recognized by Standley & Steyerl., 1952]

coloniae Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 31. 1936. TYPE: Peru, Junín, Colonia Perené.
El. 680 m. Killip & Smith 25053 (holotype: US; isotype:
ILL).

condormiens Trel. in Yuncker, Field Mus. Publ. Bot. 17: 332.
1938. TYPE: Honduras, Comayagua, ... El Achote, above
Siguatepeque. El. 1800 m. 1 AUG 1936. Yuncker, Dawson &
Youse 6237 (holotype: ILL).-- [This species recognized by
Standley & Steyerl., 1952]

confertispica Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 32. 1936. TYPE: Peru, Huánuco, Mito.
El. 2700 m. 8-22 JUL 1922. Macbride & Featherstone 1646
(wrongly publ. as Macbride 1466) (holotype: F 518142;
isotype: ILL).

confertispica var. erecta Trel. in J.F. Macbr., Field Mus.
Publ. Bot. 13(No. 357): 32. 1936. TYPE: Peru, Huánuco,
Mito. El. 2700 m. JUL-AUG 1922. Macbride & Featherstone
1915 (holotype: F 518410; isotype: ILL).

congestispica Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 32. 1936. TYPE: Peru, Junín, Huacapistana.
6 DEC 1924. Stevens 62 (holotype: ILL).

connixa Trel. & Yuncker, Piperaceae no. S. Amer. 2: 717, fig.
639. 1950. TYPE: Colombia, Santander, Río Suratá Valley,
between Bucaramanga and El Jaboncillo. El. 800-1500 m.
2 JAN 1927. Killip & Smith 16353 (holotype: GH; isotype:
ILL).

conocarpa Trel. in Yuncker, Field Mus. Publ. Bot. 17: 332.
1938. TYPE: Honduras, Comayagua, above El Achote, near
Siguatepeque. El. 1800 m. 28 JUL 1936. Yuncker, Dawson &
Youse 6189 (holotype: ILL; paratype at ILL: Yuncker, Dawson
& Youse 6010).-- [= P. quadrifolia (fide Standley &
Steyerl., 1952)]

* contraria Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 24.
1931. TYPE: Santo Domingo [Dominican Republ.], La Cumbre.
El. 250 m. 1929. Ekman 12399 (holotype, or LECTOTYPE
designated herein: ILL).

conturbans Trel. & Yuncker, Piperaceae no. S. Amer. 2: 750, fig. 674. 1950. TYPE: Colombia, Cundinamarca, Sasaima. 21 JAN 1941. Antonio Camilo 112 (holotype: ILL; paratype at ILL: Laureano Javier 2).

conulifera Trel. ex Stehlé & Quentin var. acutifolia Trel. ex Stehlé, Bull. Soc. Bot. France 85: 578. 1939 (without a Latin diagnosis). TYPE: Guadeloupe, bosquets littoraux de Campeche à l'Anse-Bertrand. El. 10 m. Stehlé & Stehlé 1620 (holotype: NY; isotype: ILL; paratypes at ILL: Stehlé & Stehlé 1621, 1649, 2122, 2184, 2195, 2198).--
[= P. magnoliifolia (fide Howard, 1973)]

- * conulifera var. matoubana [probably a spelling error of "matombana"] Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 45(fig. 1), 46. 1948 (nomen nudum). TYPE: Guadeloupe. Stehlé & Stehlé 2558 (holotype, or LECTOTYPE designated herein: NY; isotype or isolectotype: ILL).-- [= P. magnoliifolia (fide Howard, 1973)]

conulifera var. stehleae Trel. ex Stehlé, Bull. Soc. Bot. France 83: 628. 1936 (nomen subnudum); op. cit. 85: 579. 1938 (without a Latin diagnosis). TYPE: Marie-Galante. Mme. Stehlé 299 (holotype: NY; fragments of the type at ILL).-- [= P. magnoliifolia (fide Howard, 1973)]

conulifera var. stehlei Trel. ex Stehlé, Bull. Soc. Bot. France 83: 628. 1936 (nomen subnudum); validly publ. by Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 45(fig. 2), 46. 1948. TYPE: Guadeloupe. Stehlé 24 (holotype: NY; fragment of the type at ILL).--
[= P. magnoliifolia (fide Howard, 1973)]

- * conulifera var. tenuispica Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 45(fig. 5), 46. 1948 (nomen nudum). TYPE: Guadeloupe. Stehlé 2547 (LECTOTYPE, designated herein: NY; isolectotype: ILL).--
[= P. magnoliifolia (fide Howard, 1973)]

- * conulifera var. tivoliana Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 46. 1948 (nomen nudum). TYPE: Martinique, Tivoli Bot. Gard. Stehlé & Stehlé 2328 [LECTOTYPE, designated herein: NY; isolectotype: ILL (2 sheets)].-- [= P. magnoliifolia (fide Howard, 1973)]

corcovadensis Gardn. forma latifolia Yuncker, Bol. Inst. Bot. (São Paulo) 3: 159. 1966. TYPE: Brazil, São Paulo, Estação Biológica, Alto da Serra. 17 SEP 1943. Kuhlman s.n. [holotype: S; paratype at ILL: Usteri s.n. (= SP 12621)].--
[This taxon recognized by Yuncker, 1974]

- corozosana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 25. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, Los Corozos, S. José de Ocoa. El. 750 m. 19 MAR 1929. Ekman 11969 (holotype: ?; isotype: ILL).
- cotoneasterifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 33. 1936. TYPE: Peru, Junín, Carpapata. El. 2700-3200 m. 7 JUN 1929. Killip & Smith 24390 (holotype: US; isotype: ILL).
- crassispica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 321, 328. 1927. TYPE: Haiti, Morne Darraq, Le Borgne. El. 800 m. Ekman 4762 (holotype: ?; isotype: ILL).
- crassulaecaulis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 33. 1936. TYPE: Peru, Junín, Carpapata. El. 2400 m. 7 JUN 1929. Killip & Smith 24355 (holotype: US; isotype: ILL).
- crinigera Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 33. 1936. TYPE: Peru, Junín, Palca. 6 DEC 1924. Stevens 45 (holotype: ILL).
- crispipila Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 322, 330. 1927. TYPE: Haiti, Port de Paix, Haut-Piton. El. 1000 m. Ekman 4612 (holotype: ?; isotype: ILL).
- crotalophora Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 34. 1936. TYPE: Peru, Junín, La Merced, Hacienda Schunke. El. 1200 m. AUG-SEP 1923. Macbride 5644 (holotype: F 536682; isotype: ILL).-- [This collection is also the type of P. semielongata Trel. in J.F. Macbr., op. cit. 95, but the name P. crotalophora was adopted for the species by Trel. & Yuncker, 1950]
- cruciata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 34. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 800 m. Schunke 343 (holotype: F 571399; fragments of the type at ILL).
- cruentata Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 302. 1940. TYPE: Panama, Bocas del Toro, Isla de Colón. El. 25-75 m. 17-18 AUG 1938. Woodson, Allen & Seibert 1941 (holotype: MO; isotype: ILL).-- [This species recognized by Yuncker, 1950; = P. rotundifolia (L.) Kunth (fide Burger, 1971)]
- crusculibacca Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 34. 1936. TYPE: Peru, Junín, Huacapistana. 6 DEC 1924. Stevens 90 (holotype: ILL).

cryptolepida Trel., Contr. U.S. Nat. Herb. 26(4): 206. 1929.

TYPE: Costa Rica, Limón, Hamburg Finca, Río Reventazón below Cairo. El. 55 m. 19 FEB 1926. Standley & Valerio 48932 (holotype: US 1251287; isotype: ILL; paratype at ILL: Standley & Valerio 49016).-- [= P. panamensis C.DC. ex Schroeder (fide Burger, 1971)]

cryptotricha Trel. ex Badillo, Cat. Fl. Venezolana 1: 244. 1945

(nomen nudum). TYPE: Venezuela, Miranda, Galipán. El. 1800-2400 m. 20 MAY 1913. Pittier 6213 (holotype: US; fragments of the type at ILL).-- [= P. reflexa (L.f.) A. Dietr. (fide Trel. & Yuncker, 1950; Yuncker, 1950-51 and 1955); = P. tetraphylla (cf. Yuncker, 1974)]

cuatrecasasana Trel., Trab. Mus. Nac. Ci. Nat., Ser. Bot. 33:

46. 1936 (without a Latin diagnosis). TYPE: Colombia, Tolima, El Salto, Mt. Tolima. El. 3000 m. 15 MAY 1932. Cuatrecasas 2413 (holotype: MA; fragments of the type at ILL).-- [This species recognized by Trel. & Yuncker, 1950 (2: 560), but not validated]

* cubana C.DC. in DC. forma platana Trel. in Feddes Repert. Spec.

Nov. Regni Veg. 23: 19. 1926 (nomen nudum). Type citation: "Eastern Cuba ... Rio Yara to Rio Plata (Ekman 14213, 14780 - f. platana)" = SYNTYPES: ILL (Ekman 14780 the LECTOTYPE, designated herein).-- [= P. glabella] (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1955, 1957, 1966 and 1974)]

cubensis C.DC. var. haitensis Trel. in Feddes Repert. Spec.

Nov. Regni Veg. 23: 323, 331. 1927. TYPE: Haiti, Port de Paix, Haut-Piton. El. 800 m. Ekman 3684 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 3683).-- [The species recognized by Adams et al., 1972 and Yuncker, 1950-51]

* cufodontii Trel. in Cuf., Archivo Bot. Sist. Fitogeogr. &

Genet. 10: 26. 1934. TYPE: Costa Rica, Vulcanus Irazu, ... Guayabillos. El. 2500 m. 23 MAY 1930. Cufodontis 509 (LECTOTYPE, designated herein: ILL).-- [= P. hylophila (fide Burger, 1971)]

cumbreana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 692, fig.

610. 1950. TYPE: Colombia, El Valle, La Cumbre. El. 1500-1700 m. 11-16 JUL 1922. Hazen 11837 (holotype: PH 601614; isotype: ILL).

currucaeformis Trel. in J.F. Macbr., Field Mus. Publ. Bot.

13(No. 357): 35. 1936. TYPE: Peru, Junín, La Merced, Schunke Hacienda. El. 1400-1700 m. 8-12 JUN 1929. Killip & Smith 24542 (holotype: US; isotype: ILL).

- cushiana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 36. 1936. TYPE: Peru, Huánuco, Cushi.
El. 1500 m. 19-23 JUN 1923. Macbride 4816 (holotype:
F 535850; isotype: ILL).
- daguana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 696, fig.
615. 1950. TYPE: Colombia, El Valle, Dagua Valley,
Cisneros. El. 300-500 m. 21 SEP 1922. Killip 11482
(holotype: GH; isotype: ILL).
- daiquiriana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23:
22, 30. 1926. TYPE: Cuba, Oriente, Daiquirí. 29 OCT 1916.
Ekman 8140 (holotype: ?; isotype: ILL; paratype at ILL:
Ekman 8285).-- [= P. obtusifolia (fide Trel. & Yuncker,
1950; Yuncker, 1950, 1950-51, 1955, 1957 and 1974)]
- dantoana Trel. in Yuncker, Field Mus. Publ. Bot. 9(4): 274.
1940. TYPE: Honduras, Atlántida, Río Danto, Mt. Cangrejal,
near La Ceiba. 16 JUL 1938. Yuncker, Koepfer & Wagner 8499
(holotype: ILL).-- [= P. granulosa (fide Standley &
Steyerm., 1952)]
- dawsoni Trel. in Yuncker, Field Mus. Publ. Bot. 17: 333. 1938.
TYPE: Honduras, Comayagua, above El Achote, near
Siguatopeque. El. 1800 m. 21 JUL 1936. Yuncker, Dawson &
Youse 6009 (holotype: ILL).
- debilipes Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 37. 1936. TYPE: Peru, Junín, Pichis Trail,
Yapas. El. 1350-1600 m. 28, 29 JUN 1929. Killip & Smith
25545 (holotype: US; isotype: ILL).
- debilipes var. dimorpha Trel. in J.F. Macbr., Field Mus. Publ.
Bot. 13(No. 357): 38. 1936. TYPE: Peru, Junín, Pichis
Trail, Yapas. El. 1350-1600 m. Killip & Smith 25591
(holotype: US; fragments of the type at ILL).
- deceptrix Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 38. 1936. TYPE: Peru, Loreto, San Antonio, on
Río Itaya. El. 110 m. 18 SEP 1929. Killip & Smith 29325
(holotype: US; isotype: ILL).
- decora Dahlst. var. pilosa Yuncker, Bol. Inst. Bot. (São Paulo)
3: 161. 1966. TYPE: Brazil, Minas Gerais, Belo Horizonte,
Serra do Curral. 1 MAR 1934. Sampaio 7374 [holotype: R;
isotype: ILL; paratype at ILL: Hoehne & Gehrt s.n.
(= SP 17555)].-- [This variety recognized by Yuncker, 1974]
- defluens Trel. in Yuncker, Field Mus. Publ. Bot. 17: 333. 1938.
TYPE: Honduras, Lancetilla Valley, near Lancetilla.
El. 27 m. 5 AUG 1934. Yuncker 4916 (holotype: ILL).

- degeneri Yuncker, Bernice P. Bishop Mus. Bull. 112: 25. 1933.
TYPE: Hawaii, Molokai, east arm of Kaluaaha Valley, on shaded cliffs. 12 JUL 1928. Degener & Wiebke 3061 (holotype: ?; isotype: ILL).-- [This species recognized by Kartesz & Kartesz, 1980]
- dendroides Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 38. 1936. TYPE: Peru, Junín, Chahua(?). El. 2700 m. 12 MAY 1923. Macbride 3640 (holotype: F 534704; isotype: ILL; paratype at ILL: Macbride & Featherstone 1784).
- dendromorphis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 39. 1936. TYPE: Peru, Cuzco, Marcapata. El. 3000 m. 15-16 FEB 1929. Weberbauer 7800 (holotype: F 605350; isotype: ILL).
- diaphanoides Dahlst. Kongl. Svenska Vetenskapsakad. Handl. 33(2): 112, tab. 10, fig. 3. 1900. TYPE: Brazil, Rio Grande do Sul, Santo Ângelo, near Cachoeira. 31 JAN 1893. Malme 522 (holotype: S; isotype: ILL).-- [This species recognized by Yuncker, 1974]
- diehliana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 39. 1936. TYPE: Peru, probably in Cuzco. Diehl 2526 (holotype: F 630026; fragments of the type at ILL).
- diruptorum Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 302. 1940. TYPE: Panama, Chiriquí, Bajo Mona, mouth of Quebrada Chiquero, along Río Caldera. El. 1500-2000 m. 3 JUL 1938. Woodson, Allen & Seibert 1023 (holotype: MO; isotype: ILL).-- [This species recognized by Yuncker, 1950; = P. reptabunda Trel. (fide Burger, 1971)]
- discilimba Trel. & Yuncker, Piperaceae no. S. Amer. 2: 489, fig. 433. 1950. TYPE: Colombia, Santander, between Piedecuesta and Las Vegas. El. 2000-2500 m. 19-24 DEC 1926. Killip & Smith 15502 (holotype: US 1351374; isotype: ILL; paratype at ILL: Killip & Smith 16568).
- distractiflora Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 40. 1936. TYPE: Peru, Junín, Hacienda Chalhauapuquio. 8 DEC 1924. Stevens 214 (holotype: ILL).
- divaricata Yuncker, Lilloa 27: 203, pl. 81. [1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3724 (holotype: US 1177042; isotype: ILL).-- [This species recognized by Yuncker, 1974]

- dodgei Trel. in Standley, Field Mus. Publ. Bot. 18(4): 312. 1937. TYPE: Costa Rica, Cartago, NW slope of Cerro de la Carpintera above La Union des Tres Cruces. El. 1460-1700 m. Dodge & Thomas 4782 (holotype: GH; isotype: ILL).-- [= P. carpinterana C.DC. (fide Burger, 1971)]
- doleana Trel. ex Stehlé, Candollea 10: 288. 1946. TYPE: Guadeloupe, Dolé. JAN 1929. Trelease 66 (holotype: ILL; paratypes at ILL: Trelease 67, 68).-- [= P. myrtifolia (fide Howard, 1973)]
- dolosa Trel. ex Stehlé, Bull. Soc. Bot. France 83: 628. 1937 (nomen subnudum); Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 52. 1948. TYPE cited: "îlot des Saintes, Terre-de-Haut." Stehlé & Stehlé 155 [holotype: ?; a specimen (fragments) at ILL marked "Type" is No. 755 from Guadeloupe. Authentic specimen from "îlot des Saintes" at ILL: Stehlé & Stehlé 1724].-- [= P. myrtifolia (fide Howard, 1973)]
- * dominicana C.DC. var. myriantha Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 25. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, ... Bejucal, S. José de Ocoa. El. 1300 m. 13 MAR 1929. Ekman 11903 (holotype, or LECTOTYPE designated herein: ILL).
- dominicana var. roberjotana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 318, 325. 1927. TYPE: Haiti, La Selle, Roberjot. El. 1700 m. 19 AUG 1924. Ekman 1542 (holotype: ?; isotype: ILL).
- donaguiana C.DC. [var.] β longifilamentosa C.DC., Candollea 1: 308. 1923. No collection cited, but PROBABLE TYPE: Mexico, Hidalgo, barranca below Trinidad Iron Works. El. 5000 feet. 16 JUL 1904. Pringle 8992 (holotype: ?; probable isotype: ILL).-- [Pringle's specimen has a printed label with the above name, followed by the designation "n. var." Trelease marked the sheet as "P. longifilamentosa (C.DC.) Cotype," but the latter combination was never published]
- dondonensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 26: 341. 1929. TYPE: Haiti, Massif du Nord, Dondon, near Citadelle Laferrière. El. 700 m. Ekman 9643 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 8260).
- * dondonensis var. caimitensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 26: 341. 1929. TYPE: Haiti, Anse-à-Maçon, Gde. Caïmite, at sea level. 22 AUG 1927. Ekman 8945 (holotype, or LECTOTYPE designated herein: ILL).

drapeta Trel. in J.F. Macbr., Field Mus. Publ. Bot.

13(No. 357): 40. 1936. TYPE: Peru, Huánuco, Huacachi near Muña. El. 1950 m. MAY-JUN 1923. Macbride 4122 (holotype: F 535193; isotype: ILL).

- * duartensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 25. 1931. TYPE: Santo Domingo [Dominican Republ.], Duarte, Loma Quita-Espuela. El. 800 m. 25 APR 1929. Ekman 12281 (holotype, or LECTOTYPE designated herein: ILL).

duidana Trel. in Gleason, Bull. Torrey Bot. Club 58: 354. 1931.

TYPE: Venezuela, Amazonas, slopes of Ridge 25, summit of Mt. Duida. El. 1650-1800 m. NOV-DEC 1928. Tate 438 (holotype: NY; isotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950 and Yuncker, 1955]

duricaulis Trel. in Woodson & Schery, Ann. Missouri Bot. Gard.

27: 302. 1940. TYPE: Panama, Chiriquí, trail from Cerro Punto to headwaters of Río Caldera. El. 2250-2500 m. 14 JAN 1939. Allen 1441 (holotype: ILL).-- [This species recognized by Yuncker, 1950]

earlei Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 22,

31. 1926. TYPE: Cuba, Oriente, Cooper's Ranch, Baracoa. Underwood & Earle 872 (holotype: NY; paratypes at ILL: Ekman 14701, 14880).-- [= P. obtusifolia (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1955, 1957 and 1974)]

ecuadorensis C.DC., Bull. Herb. Boissier 6: 507. 1898. TYPE:

Ecuador, Andes of Quito. Jameson 543 [holotype: B; fragment of isotype (from LE) at ILL].-- [This species recognized by Trel. & Yuncker, 1950]

effusa Yuncker, Lilloa 27: 240, pl. 117. [1953] 1955. TYPE:

Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3732 (holotype: US 1177039; isotype: ILL; paratype at ILL: Steinbach 9353).

efimbriata Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 226. 1927.

TYPE: Bolivia, Pongo de Quime. El. 11500 ft. 12 JUL 1921. White 164 (holotype: ILL).-- [This species recognized by Yuncker, 1955]

ekmanii Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 22,

31. 1926. TYPE: Cuba, Oriente, Sierra Maestra, summit of Pico Turquino. El. 2040 m. 22-24 JUL 1922. Ekman 14531 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 5524).-- [= P. acuminata (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51 and 1974)]

- ellsworthii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 486, fig. 430. 1950. TYPE: Colombia, Cauca, "La Gallera", Micay Valley. Killip 7675 (holotype: US 1142394; isotype: ILL).
- emarginella (Sw.) C.D.C. in DC. var. ovalis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 711, fig. 634. 1950. TYPE: Ecuador, Guayas, Teresita, 3 km W of Bucay. El. 270 m. 5-7 JUL 1923. Hitchcock 20458 (holotype: US 1195405; fragments of the type at ILL).
- enenyasensis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 42. 1936. TYPE: Peru, Junín, Pichis Trail, Eneñas. El. 1600-1900 m. JUN-JUL 1929. Killip & Smith 25654 (holotype: US; isotype: ILL).
- ephemera Ekman, Ark. Bot. 22A(9): 20. 1929 (nomen nudum). TYPE: Haiti, La Vallée. 21 MAR 1928. Ekman 9755 (holotype: ?; isotype: ILL).-- [= P. pellucida (L.) Kunth (fide Trelease's labelling)]
- epilobioides Trel. & Yuncker, Piperaceae no. S. Amer. 2: 551, fig. 483. 1950. TYPE: Colombia, Cauca, "Canaan," Mt. Puracé. El. 3100-3300 m. 11-13 JUN 1922. Pennell & Killip 6618 (holotype: US 1142144; isotype: ILL; paratype at ILL: Mutis 547).-- [This species recognized by Yuncker, 1955a]
- epilobioides var. glabrilimba Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 552. 1950. TYPE: Colombia, Cauca, headwaters of Río Palo, Quebrada de Santo Domingo. El. 2665 m. 14 DEC 1944. Cuatrecasas 19298 (holotype: ILL).
- eripipunculata Trel. in Yuncker, Field Mus. Publ. Bot. 17: 333. 1938. TYPE: Honduras, Comayagua, on a rotten log in ravine near El Rincón, about 10 miles W of Siguatepeque. El. 1400-1500 m. 25 JUL 1936. Yuncker, Dawson & Youse 6079 (holotype: ILL; paratype at ILL: Yuncker, Dawson & Youse 6104).
- erythrophlebia Trel., Contr. U.S. Nat. Herb. 26(4): 200. 1929. TYPE: Costa Rica, Cartago, El Muñeco, Río Navarro. El. 1400 m. 8, 9 FEB 1924. Standley 33418 (holotype: US 1229226; fragments of the type at ILL).-- [= P. hylophila (fide Burger, 1971)]
- erythropremna Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 27. 1926. TYPE: Cuba, Pinar del Río, Loma Harenales. Shafer 13784 (holotype: NY; paratype at ILL: Ekman 16604).-- [This species recognized by Yuncker, 1950-51]

- erythrostachya Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 43. 1936. TYPE: Peru, Huánuco, Pozuzo. El. 600 m. 20-22 JUN 1923. Macbride 4667 (holotype: F 535741; isotype: ILL).
- estrellana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 43. 1936. TYPE: Peru, Ayacucho, Estrella, between Huanta and Río Apurímac. El. 500 m. 8, 14 May 1929. Killip & Smith 23064 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 25281).
- euosma Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 22, 29. 1926. TYPE: Cuba, Pinar del Río, Sierra de S. Vicente. 1924. Ekman 18691 (holotype: ?; isotype: ILL).-- [= P. magnoliifolia (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1957, 1966 and 1974)]
- evadens Trel. ex Stehlé, Fl. Descr. Antill. Fr. 2(1): 134. 1940; Bull. Agric. Martinique 9(3): 211, tab. 12. 1940. TYPE: Guadeloupe, Soufrière lane. El. 950 m. Stehlé 330 (holotype: NY; fragments of the type at ILL).-- [= P. hirtella (fide Howard, 1973)]
- ewanii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 573, fig. 497. 1950. TYPE: Colombia, Nariño, 6 km above San José, vicinity of Cerro Tablón, region of Volcán de Doña Ana. 14 DEC 1944. Ewan 16574 (holotype: ILL; paratype at ILL: Ecuador: Penland & Summers 2).
- exiguispica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 44. 1936. TYPE: Peru, Loreto, Puerto Arturo. El. 155-210 m. OCT-NOV 1929. Williams 5331 (holotype: F 622538; isotype: ILL).
- exilamenta Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 44. 1936. TYPE: Peru, San Martín, Tarapoto. El. 360-900 m. DEC 1929. Williams 5722 (holotype: F 622513; isotype: ILL; paratype at ILL: Williams 6258).
- exiliramea Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 44. 1936. TYPE: Peru, Loreto, Santa Rosa. El. 135 m. 1-5 SEP 1929. Killip & Smith 28768 (holotype: US; isotype: ILL).
- exuberantifolia Trel. in Standley, Field Mus. Publ. Bot. 18(4): 313. 1937. TYPE: Costa Rica, Heredia, Cerro Central de Zurquí. El. 1600-1700 m. 27 DEC 1929. Dodge, Thomas, Valerio & Valerio 6140 "[a]", i.e., pro parte (holotype: GH; isotype: ILL).-- [= P. hylophila (fide Burger, 1971)]

- famelica Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 45. 1936. TYPE: Peru, Junín, E of Quimiri
Bridge, near La Merced. El. 800-1300 m. 1-3 JUN 1929.
Killip & Smith 23961 (holotype: US; isotype: ILL).
- fieldiana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 45. 1936. TYPE: Peru, Huánuco, Pozuzo.
El. 600 m. 20-22 JUN 1923. Macbride 4684 (holotype:
F 535758; isotype: ILL; paratype at ILL: Killip & Smith
25167).
- filici-decorans Trel. in Yuncker, Field Mus. Publ. Bot. 17:
333. 1938. TYPE: Honduras, Comayagua, near El Achote, above
Siguatepeque. El. 1350 m. 26 JUL 1936. Yuncker, Dawson &
Youse 6105 (holotype: ILL).
- fimbribractea Trel., Contr. U.S. Nat. Herb. 26(4): 196. 1929.
TYPE: Costa Rica, Cartago, Dulce Nombre. El. 1400 m.
27 FEB 1924. Standley 35897 (holotype: US 1229256;
paratypes at ILL: Standley 41447; Standley & Torres 51704;
Standley & Valerio 45481).-- [= P. costaricensis C.DC. (fide
Burger, 1971)]
- fissicola Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 46. 1936. TYPE: Peru, Huánuco, Huánuco.
El. 2100 m. 5-8 APR 1923. Macbride 3255 (holotype:
F 534325; isotype: ILL).
- flagitans Trel. in Yuncker, Field Mus. Publ. Bot. 17: 334.
1938. TYPE: Honduras, Comayagua, river bank 6 km W of
Siguatepeque. El. 1200 m. 8 AUG 1936. Yuncker, Dawson &
Youse 6383 (holotype: ILL).-- [This species recognized by
Standley & Steyerl., 1952]
- floresensis Trel. in Yuncker, Field Mus. Publ. Bot. 9: 275.
1940. TYPE: Honduras, Yoro, Las Flores. El. 270 m.
30 JUN 1938. Yuncker, Koepper & Wagner 8149 (holotype:
ILL).-- [This species recognized by Standley & Steyerl.,
1952]
- floridensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23:
17, 25. 1926. TYPE: Cuba, Oriente, Sierra Maestra, Florida
above Daiquirí. El. 750 m. 28-29 JUN 1914. Ekman 1560
(holotype: ?; isotype: ILL).-- [= P. grisebachii (fide
Yuncker, 1950-51)]
- foliata Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 47. 1936. TYPE: Peru, Junín, Huacapistana.
8 DEC 1924. Stevens 65 (holotype: ILL; paratype at ILL:
Stevens 178).

* formonensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 24: 360. 1928. TYPE: Haiti, La Hotte, Mont Formon. El. 2150 m. Ekman 7517 (holotype, or LECTOTYPE designated herein: ILL).

fortunati Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 48. 1936. TYPE: Peru, Cuzco, valley of Río Apurímac. FEB 1929. Herrera s.n. [holotype: F 589470; fragments of the type at ILL; paratype at ILL (fragments): Weberbauer 5684].-- [= P. mandonii C.DC. in DC. (fide Trel. & Yuncker, 1950; Yuncker, 1955 and 1974)]

fortipes Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 48. 1936. TYPE: Peru, Ayacucho, Aina. El. 750-1000 m. 7, 17 MAY 1929. Killip & Smith 22589 (holotype: US; isotype: ILL).

fragilis Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 551, fig. 482. 1950. TYPE: Colombia, Nariño, Cordillera Oriental, vicinity of Funes along Río Tellez. El. 2600 m. 1 DEC 1944. Ewan 16509 (holotype: ILL).

fragrantissima Trel. & Yuncker, Piperaceae no. S. Amer. 2: 449, fig. 395. 1950. TYPE: Colombia, Putumayo, Cordillera Oriental, Quebrada Blanca, Río Afiladores drainage, along road to Cerro Precipicio. El. 2131 m. Ewan 16281 (holotype: ILL).

fraseri C.DC. var. peltata Yuncker ex Espinosa, Univ. Loja, Estud. Bot. Ecuador 2: 31. 1949 (nomen nudum), in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 740. 1950. TYPE: Ecuador, Loja, Horta-Naque. 5 NOV 1946. Espinosa 859 (holotype: ILL).

fulvescens Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 674, fig. 590. 1950. TYPE: Colombia, El Valle, Km. 8, along hwy. from Buenaventura to Cali, near sea level. 10 JUN 1944. Killip & Cuatrecasas 39011 (holotype: US 1856883; isotype: ILL).

fumeana Stehlé & Trel. in Stehlé, Bull. Soc. Bot. France 84: 408. 1937. TYPE: Guadeloupe. Stehlé & Stehlé 340 (holotype: ?; fragment of the type at ILL).-- [= P. urocarpa Fisch. & Mey. (fide Howard, 1973)]

fumeana var. stehlei Trel. ex Stehlé, Bull. Soc. Bot. France 84: 408. 1937. TYPE: Guadeloupe, ... ad rives fluminis St.-Louis. 22 FEB 1936. Stehlé & Stehlé 370 (holotype: NY; isotype: ILL).-- [= P. urocarpa (fide Howard, 1973)]

- * galiifolia Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 227. 1927.
TYPE: Bolivia, Pongo de Quime. El. 11500 feet.
12 JUL 1921. White 166 (LECTOTYPE, designated herein: ILL;
isolectotype: NY).-- [= P. galioides (fide Yuncker, 1955)]
- gehrigeri Trel. ex Badillo, Cat. Fl. Venezuelana 1: 244. 1945
(nomen nudum); Trel. & Yuncker, Piperaceae no. S. Amer. 2:
527, fig. 465. 1950. TYPE: Venezuela, Mérida, Tabay, en
selva de la Isla y El Rincón. El. 2500-2700 m. 8 SEP 1930.
Gehriger 421 (holotype: US 1498577; isotype: ILL).
- gentianaefolia Sodiro, Contrib. al Conoc. Fl. Ecuador Monogr.
1, Ed. 2, Nuevas Adic. p. 3 [1902]; Anales Univ. Centr.
Ecuador 15: 98. 1902. TYPE: Ecuador, Tungurahua.
El. 2600 m. 1901. Sodiro s.n. (holotype: ?; isotype:
ILL).-- [= P. saligna (fide Trel. & Yuncker, 1950)]
- gilberti Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 50. 1936. TYPE: Peru, Cuzco, Ollantaitambo.
El. 3000 m. 15 MAY 1915. Cook & Gilbert 740 (holotype:
US; fragments of the type at ILL).
- glabrirhachis Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 50. 1936. TYPE: Peru, Junín, Hacienda
Chalhuapuquio. 8 DEC 1924. Stevens 211 (holotype: ILL;
paratypes at ILL: Stevens 64, 179).
- glareosa Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 50. 1936. TYPE: Peru, Loreto, Río Santiago,
above Pongo de Manseriche. El. 200 m. 6 DEC 1931. Mexia
6236 (holotype: UC; isotype: ILL).
- gloriosaeifolia Trel. in Feddes Repert. Spec. Nov. Regni Veg.
23: 319, 325. 1927. TYPE: Haiti, Morne de la Hotte, Ma
Blanche. Ekman 526 (holotype: ?; fragments of the type at
ILL).
- gorgonillana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 632,
fig. 554. 1950. TYPE: Colombia, Nariño, Gorgonilla Island,
near sea level. 8 FEB 1939. Killip & García 33053
(holotype: US 1770053; isotype: ILL; paratypes at ILL:
Killip & García 33079, 33138).
- gorgonillana var. hirsutula Trel. & Yuncker, Piperaceae no. S.
Amer. 2: 632. 1950. TYPE: Colombia, Cauca, highlands of
Popayán. El. 1500-1800 m. FEB 1902. Lehmann B.T. 1009
(holotype: GH; paratype at ILL: Killip 11620).

granata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 17, 24. 1926. TYPE: Cuba, Oriente, Sierra Maestra, cliffs, northern spur of Pico Turquino. El. 1850-1900 m.
24 JUL 1922. Ekman 14590 [holotype: ?; isotype: ILL; paratypes at ILL: Ekman 14580 (2 sheets)].-- [= P. galioides (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51 and 1955)]

granulata Trel. & Yuncker, Piperaceae no. S. Amer. 2: 654, fig. 572. 1950. TYPE: Colombia, Santander, vicinity of Barranca Bermeja, Magdalena Valley, etc. El. 100-500 m.
17 NOV 1934. Haught 1420 (holotype: US 1661694; isotype: ILL).

granulatifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 50. 1936. TYPE: Peru, Junín, Puerto Yessup. El. 400 m. 10-12 JUL 1929. Killip & Smith 26390 (holotype: US; isotype: ILL).

granulatilimba Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 51. 1936. TYPE: Peru, Loreto, Yurimaguas, lower Río Huallaga. El. 155-210 m. OCT-NOV 1929. Williams 4617 (holotype: F 629584; isotype: ILL; paratypes at ILL: Killip & Smith 26215; Williams 2802, 2945).

granulosa Trel., J. Wash. Acad. Sci. 19: 328. 1929. TYPE: Honduras, Atlántida, Lancetilla Valley near Tela. El. ca 100 m. 11 JAN 1928. Standley 54360 (holotype: F 583593; isotype: ILL).-- [This species recognized by Standley & Steyerl., 1952]

guaiquinimana Trel. ex Badillo, Cat. Fl. Venezolana 1: 245. 1945 (as guaiquinimiana, nomen nudum); Trel. & Yuncker, Piperaceae no. S. Amer. 2: 596, fig. 518. 1950. TYPE: Venezuela, Bolívar, Río Paragua, Guaiquinima. El. 285 m. 14, 15 APR 1943. Killip 37504 (holotype: US 1855529; isotype: ILL).

guanensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 17, 24. 1926. TYPE: Cuba, Pinar del Río, base of Sierra Guane. NOV 1911. Shafer 10541 (holotype: US 1047841; fragments of the type at ILL).-- [This species recognized by Yuncker, 1950-51]

- * guayabillosana Trel. in Cuf., Archivio Bot. Sist. Fitogeogr. & Genet. 10: 26. 1934. TYPE: Costa Rica, Vulcanus Irazú ... Guayabillos. El. 2300 m. 28 MAY 1930. Cufodontis, 317 (LECTOTYPE designated herein: ILL).-- [= P. galioides (fide Burger, 1971)]

- gucayana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 51. 1936. TYPE: Peru, Cuzco, Urubamba Valley, near Gucay. El. 3000 m. Herrera 1464 (holotype: US; fragments of the type at ILL).
- guttulatissima Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 25. 1926. TYPE: Cuba, Pinar del Río, Sierra Caliente, Sumidero. 24 NOV 1923. Ekman 18191 (holotype: ?; isotype: ILL).-- [= P. hirta C.DC. (fide Yuncker, 1950-51)]
- haematolepis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 52. 1936. TYPE: Peru, Junín, Hacienda Chahuapuquio. 8 DEC 1924. Stevens 212 (holotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950]
- haughtii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 523, fig. 463. 1950. TYPE: Colombia, Santander, vicinity of Barranca Bermeja, Magdalena Valley, between Sogamosa and Colorado rivers. El. 100-500 m. 25 AUG 1934. Haught 1341 (holotype: US 1661659; isotype: ILL; paratype at ILL: Haught 2059).
- hebetata Trel. & Yuncker, Piperaceae no. S. Amer. 2: 529, fig. 468. 1950. TYPE: Colombia, Putumayo, Umbría. El. 325 m. OCT-NOV 1930. Klug 1805 (holotype: US 1518027; fragments of the type at ILL).
- herediana Trel., Contr. U.S. Nat. Herb. 26(4): 197. 1929. TYPE: Costa Rica, Heredia, Yerba Buena. El. 2000 m. FEB 1926. Standley & Valerio 49260 (holotype: US 1251293; paratypes at ILL: Standley & Valerio 50200, 52337).-- [= P. elata C.DC. ex Schroeder (cf. Burger, 1971)]
- herteri Trel., Revista Sudamer. Bot. 6: 66. 1941. TYPE: Uruguay. Herter 98388 (holotype: ?; fragments of the type at ILL).-- [= P. catharinae Miq. (fide Yuncker, 1955 and 1974)]
- heterophylla Miq. in Hooker var. grandis Yuncker, Lilloa 27: 244, pl. 121. [1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3735 (holotype: US 1176597; isotype: ILL).
- hispidorhachis Yuncker, Ann. Missouri Bot. Gard. 37: 112, fig. 21. 1950. TYPE: Panama, Prov. Panamá, Río La Maestra. El. 0-25 m. 4 DEC 1936. Allen 31 (holotype: MO; isotype: ILL).

- hispidula (Sw.) A. Dietr. var. ellipticifolia Trel. & Yuncker, Piperaceae no. S. Amer. 2: 705, fig. 626. 1950. TYPE: Colombia, Santander, Río Suratá Valley above Suratá. El. 2000-2300 m. 5-6 JAN 1927. Killip & Smith 16580 (holotype: GH; isotype: ILL).
- hispiduliformis Trel. in Moldenke, Lilloa 6: 295. 1941. TYPE: Argentina, Tucumán, Las Pavas. El. 1700 m. 9 MAR 1924. Venturi 2986 (holotype: ILL).-- [This species recognized by Yuncker, 1955]
- horrescens Trel. ex Badillo, Cat. Fl. Venezolana 1: 245. 1945 (nomen nudum). TYPE: Venezuela, Fed. Distr., upper Cotiza, near Caracas. El. above 1400 m. 23 SEP 1917. Pittier 7400 (holotype: US?; fragments of the type at ILL).-- [= P. venezueliana C.DC. (fide Trel. & Yuncker, 1950)]
- houelmonte Trel. ex Stehlé, Bull. Soc. Bot. France 83: 628. 1936 (nomen subnudum), ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited). TYPE: Guadeloupe. 25 FEB 1936. Stehlé & Stehlé 365 (holotype: NY; isotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- huacachiana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 53. 1936. TYPE: Peru, Huánuco, Huacachi near Muña. El. 1950 m. MAY-JUN 1923. Macbride 3899 (holotype: F 534962; isotype: ILL; paratype at ILL: Macbride 3416).
- huacapistana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 54. 1936. TYPE: Peru, Junín, Huacapistana. 6 DEC 1924. Stevens 89 (holotype: ILL; paratype at ILL: Macbride 4678).
- huantana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 55. 1936. TYPE: Peru, Ayacucho, Aina. El. 750-1000 m. 7, 17 MAY 1929. Killip & Smith 22728 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 22780).
- huantana var. eneyasana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 55. 1936. TYPE: Peru, Junín, Pichis Trail, Eneñas. El. 1600-1900 m. JUN-JUL 1929. Killip & Smith 25727 (holotype: US; isotype: ILL).
- huanucoana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 55. 1936. TYPE: Peru, Huánuco, Huánuco. El. 2100 m. 5-8 APR 1923. Macbride 3256 (holotype: F 534326; isotype: ILL).

- * humilis A. Dietr. var. stehlei Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 54. 1948. TYPE: Guadeloupe, Ajoupa des Bains-Jaunes. El. 900 m. Stehlé & Stehlé & Quentin 2457 -- wrongly published as no. 2547 (LECTOTYPE designated herein: NY; isolectotype: ILL, P).-- [= P. questeliana Stehlé & Trel. in Stehlé (fide Howard, 1973); the name P. humilis A. Dietr. upheld by Boufford, 1982]
- hydrocotyloides Miq. var. major Yuncker, Bol. Inst. Bot. (São Paulo) 3: 144, fig. 128. 1966. TYPE: Brazil, Guanabara, Copacabana. 25 OCT 1862. Isern 6669 (holotype: ILL).-- [This variety recognized by Yuncker, 1974]
- hydrocotyloides var. setosa Yuncker, Bol. Inst. Bot. (São Paulo) 3: 144, fig. 127. 1966. TYPE: Brazil, São Paulo, Itú. 4 DEC 1924. Hoehne s.n. (= SP 12909) (holotype: ILL).-- [This variety recognized by Yuncker, 1974]
- imbracteata Yuncker, Lilloa 27: 175, pl. 55. [1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 3737 (holotype: US 1176599; isotype: ILL).
- inaudax Trel. in Yuncker, Field Mus. Publ. Bot. 17: 334. 1938. TYPE: Honduras, Comayagua, above El Achote, near Siguatepeque. El. 1850 m. 1 AUG 1936. Yuncker, Dawson & Youse 6242 (holotype: ILL).-- [= P. condormiens (fide Standley & Steyerf., 1952)]
- infralutea Trel. & Yuncker, Piperaceae no. S. Amer. 2: 644, fig. 567. 1950. TYPE: Colombia, Caldas, above Salento. El. 2600-2800 m. 2-10 AUG 1922. Pennell 9295 (holotype: US 1142815; isotype: ILL).
- intermixta Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 26. 1926. TYPE: Cuba, Oriente. Wright 523, pro parte (holotype: G; paratypes at ILL: Ekman 8846, 14801).-- [= P. trichocaulis Trel. (fide Yuncker, 1950-51)].
- ioeides Trel. & Yuncker, Piperaceae no. S. Amer. 2: 562, fig. 490. 1950. TYPE: Colombia, Putumayo, between El Encaño and Sibundoy, Páramo de San Antonio del Bordoncillo. El. 3250 m. 4 JAN 1941. Cuatrecasas 11758 (holotype: US 1799116; isotype: ILL).
- itayana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 56. 1936. TYPE: Peru, Loreto, Rio Itaya, Soledad. El. 110 m. Killip & Smith 29753 (holotype: US; paratypes at ILL: Killip & Smith 28724, 29364, 29618).

izalcoana Trel. in Standley, J. Wash. Acad. Sci. 13: 366. 1923.
TYPE: El Salvador, Sonsonate, vicinity of Izalco.

19 MAR 1922. Standley 21874 (holotype: ILL).-- [= P. bernoullii C.DC. (fide Standley & Steyer., 1952)]

Jamesoniana C.DC. var. longifolia Trel. & Yuncker, Piperaceae no. S. Amer. 2: 605, fig. 530. 1950. TYPE: Colombia, Putumayo, Umbría. El. 325 m. 3 OCT 1930. Klug 1743 (holotype: US 1456501; isotype: ILL).-- [This variety recognized by Yuncker, 1955a]

juniniana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 57. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1200 m. Schunke 357 (holotype: F 571411; isotype: ILL; paratype at ILL: Killip & Smith 24809).

klugiana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 616, fig. 540. 1950. TYPE: Colombia, Putumayo, Umbría. 0°54'N, 76°10'W. El. 325 m. OCT-NOV 1930. Klug 2109 (holotype: US 1456756; isotype: ILL; paratype at ILL: Ewan 16763).

koepperi Trel. in Yuncker, Field Mus. Publ. Bot. 9: 275. 1940. TYPE: Honduras, Atlántida, Mt. Cangrejal. El. 300 m. 16 JUL 1938. Yuncker, Koepfer & Wagner 8508 (holotype: ILL; paratype at ILL: Yuncker, Koepfer & Wagner 8380).-- [= P. rotundifolia (fide Standley & Steyer., 1952)]

laesa Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 303. 1940. TYPE: Panama, Chiriquí, vicinity of "New Switzerland," central valley of Río Chiriquí Viejo. El. 1800-2000 m. 6-14 JAN 1939. Allen 1422 (holotype: ILL).-- [= P. palmana C.DC. (fide Burger, 1971 and Yuncker, 1950)]

lancetillana Trel. in Yuncker, Field Mus. Publ. Bot. 17: 334. 1938. TYPE: Honduras, Lancetilla Valley, hills above Lancetilla, near Tela. El. 60 m. 7 AUG 1934. Yuncker 4943 (holotype: ILL).-- [= P. obtusifolia (cf. Standley & Steyer., 1952)]

lancetillana var. spathifolia Trel. in Yuncker, Field Mus. Publ. Bot. 17: 335. 1938. TYPE: Honduras, Lancetilla Valley near Lancetilla. El. 60 m. 18 AUG 1934. Yuncker 5040 (holotype: ILL).-- [= P. obtusifolia (fide Standley & Steyer., 1952)]

lankesteri Trel. in Standley, Field Mus. Publ. Bot. 18(4): 317. 1937. TYPE: Costa Rica, Pejivalle. Lankester 1294 (holotype: F; fragments of the type at ILL).-- [= P. candelaber Trel. (fide Burger, 1971)]

la-sierrana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 530, fig. 469. 1950. TYPE: Colombia, Antioquia, La Sierra, 18 km N of Medellín. El. ca 2000 m. 8 MAR 1931. Archer 1635 (holotype: US 1542694; isotype: ILL).

late-ovata Trel., Contr. U.S. Nat. Herb. 26(4): 191. 1929. TYPE: Costa Rica, San José, Laguna de la Chonta, near Santa María de Dota. El. 2000-2100 m. 18 DEC 1925. Standley 42310 (holotype: US 1251136; paratype at ILL: Standley 42201).-- [= P. emarginella (fide Burger, 1971)]

laudabilis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 335. 1938. TYPE: Honduras, Comayagua, El Achote, above Siguatepeque. El. 1350 m. 3 AUG 1936. Yuncker, Dawson & Youse 6298 (holotype: ILL).-- [= P. collocata (fide Standley & Steyerl., 1952)]

lauxiflora Kunth var. perrubescens Trel. & Yuncker, Piperaceae no. S. Amer. 2: 481. 1950. TYPE: Colombia, Santander, Dorada Creek, 10 km S of Raizuda, etc. El. ca 300 m. 7 MAY 1937. Haught 2197 (holotype: US 1742427; paratype at ILL: Haught 1911a).

leonardi Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 322, 329. 1927. TYPE: Haiti, Mission Fonds Verettes. Leonard 4028 (holotype: US 1076422; paratypes at ILL: Ekman 1296, 1528, 2743, 4606, 4711; Leonard 8375).

* leonardi var. acuminata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 322. 1927. TYPE: Haiti, Morne Brouet. 26 JUL 1924. Ekman 1108 (holotype, or LECTOTYPE designated herein: ILL; paratypes at ILL: Leonard 7871, 8279).

leridana Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 303. 1940. TYPE: Panama, Chiriquí, Finca Lérida to Boquete. El. 1300-1700 m. 8-10 JUL 1938. Woodson, Allen & Seibert 1176 (holotype: ILL).-- [= P. maculosa (L.) Hooker (fide Burger, 1971; Trel. & Yuncker, 1950 and Yuncker, 1950)]

leuconeura Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 58. 1936. TYPE: Peru, Junín, La Merced, Hacienda Schunke. El. 1200 m. AUG-SEP 1923. Macbride 5628 (holotype: F 536667; isotype: ILL).

leucostachya C.DC. var. tolimensis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 465. 1950. TYPE: Colombia, Tolima, Cordillera Central, Quebrada Cajamarca, New Quindío Trail. 14 AUG 1922. Killip 9747 (holotype: GH; fragments of the type at ILL).

- lignescens C.DC. var. subcuneilimba Trel., Contr. U.S. Nat. Herb. 26(4): 193. 1929. TYPE: Costa Rica, San José, vicinity of Santa María de Dota. El. 1500-1800 m. DEC 1925. Standley 41564 (holotype: US 1251105; isotype: ILL; paratype at ILL: Standley 42115).-- [Cited with the species by Burger, 1971]
- ligustrina Hillebrand var. ooppuolana Yuncker, Bernice P. Bishop Mus. Bull. 112: 35. 1933. TYPE: Hawaii, E Maui, vicinity of Oopuola stream. 7 JUL 1927. Degener & Wiebke 2628 (holotype: ILL; paratypes at ILL: Degener & Wiebke 3066; Wiebke 3068, 3071).-- [This variety recognized by Kartesz & Kartesz, 1980]
- limaensis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 58. 1936. TYPE: Peru, Lima, San Geronimo in Lima. El. 150 m. 19 SEP 1923. Macbride 5920 (holotype: F; isotype: ILL).-- [This is also a paratype of P. pseudo-galapagensis Trel. in op. cit. 79]
- lindmaniana Dahlst., Kongl. Svenska Vetenskapsakad. Handl. 33(2): 44, tab. 8, fig. 7. 1900. TYPE: Brazil, Mato Grosso, Serra do Itapirapau. 23 APR 1894. Lindman 2925 (holotype: S; isotype: ILL).-- [This species recognized by Yuncker, 1974]
- linearis C.DC. in Seemann, J. Bot. 4: 145. 1866. TYPE: Ecuador, "in sylvis Andium Quitensium." El. 1800 m. Jameson 89 [holotype: G; fragment of isotype (from LE) at ILL].-- [= P. swartziana Miq. (fide Trel. & Yuncker, 1950; Yuncker, 1950-51 and 1955)]
- * lineatipila A. Rich. forma mogotana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 19. 1926. TYPE: Cuba, Pinar del Río, Sierra Sitio Sto. Tomas, region of the Mogotes. 6 OCT 1923. Ekman 16635 (LECTOTYPE, designated herein: ILL).-- [= P. glabella (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1955, 1957, 1966 and 1974)]
- loefgrenii Yuncker, Bol. Inst. Bot. (São Paulo) 3: 146, fig. 130. 1966 [as loefgrennii]. TYPE: Brazil, São Paulo, Barreira do Ataque. 12 JAN 1897. Loefgren 3606 (holotype: ILL).-- [This species upheld by Yuncker, 1974]
- longispica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 59. 1936. TYPE: Peru, Huánuco, Muña. El. 2100 m. MAY-JUN 1923. Macbride 3928 (holotype: F 534990; isotype: ILL; paratypes at ILL: Killip & Smith 22380, 22426, 24140, 24147, 24188, 24342).

lundellii Trel. ex Standley in Standley & Record, Field Mus. Publ. Bot. 12: 406. 1936. TYPE: British Honduras [Belize], Orange Walk Distr., Honey Camp. NOV 1928. Lundell 96a (holotype: F 597985; fragments of the type at ILL).--
 [= P. crassiuscula Millsp. (fide Standley & Steyerj., 1952);
 = P. pereskiaefolia (Jacquin) Kunth (fide Burger, 1971)]

macaraoana Trel. ex Badillo, Cat. Fl. Venezolana 1: 245. 1945 (nomen nudum). TYPE LOCALITY: Venezuela. Four syntypes cited (perhaps lectotypification needed): Allard 58, 172; Pittier 11549, 11907 [fragments of Pittier 11907 (obtained from LE) at ILL].-- [= P. blanda (fide Trel. & Yuncker, 1950; Yuncker 1955, 1957, 1966 and 1974)]

macbrideana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 59. 1936. TYPE: Peru, Huánuco, Huacachi, near Muña. El. 1950 m. MAY-JUN 1923. Macbride 4144 (holotype: F 535218; isotype: ILL).

- * maestrana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20, 29. 1926. TYPE: Cuba, Oriente, Sierra Maestra, Arroyo Bayajá. El. 200-400 m. 8 AUG 1922. Ekman 14767 [LECTOTYPE, designated herein: ILL (the specimen at ILL was listed as "type" by Yuncker, 1950, but it was not marked as such by Trelease); isolectotype: HAB, NY; paratypes at ILL: Ekman 7272, 14393].-- [This species recognized by Yuncker, 1950-51]

maguirei Yuncker in Maguire & Collaborators, Bull. Torrey Bot. Club 75: 291. 1948. TYPE: Suriname, Tafelberg, vicinity SE margin of Arrowhead Basin. 19 AUG 1944. Maguire 24420 (holotype: NY; isotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950 and Yuncker, 1957]

majalis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 60. 1936. TYPE: Peru, Junín, Pichis Trail, Dos de Mayo. El. 1700-1900 m. 2, 3 JUL 1929. Killip & Smith 25886 (holotype: US; isotype: ILL).

mala Trel. in Yuncker, Field Mus. Publ. Bot. 17: 335. 1938. TYPE: Honduras, Comayagua, Siguatepeque. El. 1050 m. 8 JUL 1936. Yuncker, Dawson & Youse 5737 (holotype: ILL).

malmeana Dahlst., Kongl. Svenska Vetenskapsakad. Handl. 33(2): 169, tab. 6, fig. 1. 1900. TYPE: Paraguay, near Paraguari. AUG 1893. Malme 896 (holotype: S; isotype: ILL).-- [= P. aceroana (fide Yuncker, 1955)]

- mansericheana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 60. 1936. TYPE: Peru, Loreto, mouth of Río
Santiago, Pongo de Manseriche. El. 210 m. 1 DEC 1931.
Mexia 6196 (holotype: UC; isotype: ILL).-- [= P. vulcanicola
C.DC. var. mansericheana (Trel.) Trel. & Yuncker (1950)]
- marcatana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 61. 1936. TYPE: Peru, Cuzco, Quispicanchi,
Marcapata. El. 3000 m. 15-16 FEB 1929. Weberbauer 7801
(holotype: F 605155; isotype: ILL).-- [This species
recognized by Yuncker, 1955]
- marshalliana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 61. 1936. TYPE: Peru, Huánuco, Pozuzo.
El. 600 m. Macbride 4710 (holotype: F 551172; paratype at
ILL: Schunke 460).
- martinicensis C.DC. in Stehlé, Bull. Soc. Bot. France 84: 409.
1937. TYPE: Guadeloupe, Houteurs de Goyave, Rivières Moreau
et Bouteillé. El. 300 m. Stehlé & Branquec 975 (holotype:
NY; isotype: ILL).-- [= P. nigropunctata (fide Howard,
1973)]
- martinicensis var. lata Trel. ex Stehlé & Quentin, Fl. Guadel.
Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type
cited). TYPE: Guadeloupe, Goyave. Stehlé & Stehlé 976
(holotype: NY; isotype: ILL).-- [= P. nigropunctata (fide
Howard, 1973)]
- matapalo Trel. in Standley, J. Wash. Acad. Sci. 13: 366. 1923.
TYPE: El Salvador, San Salvador. AUG 1922. Calderon 1121
(holotype: ILL).-- [= P. pililimba C.DC. ex Schroeder (fide
Standley & Steyerf., 1952); = P. olivacea C.DC. (cf. Burger,
1971)]
- * medianiana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29:
25. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua,
San Juan. El. 1950 m. 17 SEP 1929. Ekman 13605 (holotype,
or LECTOTYPE designated herein: ILL).
- megalepis Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 62. 1936. TYPE: Peru, Huánuco, trail to Tambo
de Vaca, Muña. El. 2400 m. 5-7 JUN 1923. Macbride 4275
(holotype: F 535357; isotype: ILL).
- * megalopoda Trel. in Britton & Wilson, Sci. Surv. Porto Rico &
Virgin Isl. 6: 533. 1930. TYPE: Puerto Rico, between
Guayama and Cayay. El. 300 m. 5 DEC 1929. E.G. Britton
9352 (LECTOTYPE, designated herein: ILL; isolectotype: NY).

- megapotamica Dahlst., Kongl. Svenska Vetenskapsakad. Handl. 33(2): 194, tab. 8, fig. 1. 1900. TYPE: Brazil, Rio Grande do Sul, Hamburgerberg. 20 OCT 1892. Malme 206 (holotype: S; paratype at ILL: Malme 700).-- [This species recognized by Yuncker, 1974]
- membranacea Hooker & Arnott var. puukukuiana Yuncker, Bernice P. Bishop Mus. Bull. 112: 43. 1933. TYPE: Hawaii, W Maui, along the trail leading to Puu Kukui. El. 5700 ft. Rock 10376 [holotype: BISH; paratypes at ILL: Hawaii, Kilauea: Degener 3807; Degener & Swezey 3804. E Maui: Degener & Wiebke 2394, 2630 and 2636 (2 sheets)].-- [This variety recognized by Kartesz & Kartesz, 1980]
- membranacea var. waimeana Yuncker, Bernice P. Bishop Mus. Bull. 112: 43. 1933. TYPE: Hawaii, Kauai, Kaholuamano. Rock 17183 (holotype: BISH; paratype at ILL: Molokai: Degener & Wiebke 2759).-- [This variety recognized by Kartesz & Kartesz, 1980]
- mesitasana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 469, fig. 410. 1950. TYPE: Colombia, Las Mesitas. 7 JAN 1943. Silvano Jorge & Carlos 175 (holotype: ILL).
- * michelensis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 24: 360. 1928. TYPE: Haiti, La Hotte, Chapelle, St. Michel. 1926. Ekman 6606 (holotype, or LECTOTYPE designated herein: ILL).
- microlepis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 63. 1936. TYPE: Peru, Junfn, Huacapistana. 6 DEC 1924. Stevens 91 (holotype: ILL).
- micromamillata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 63. 1936. TYPE: Peru, Huánuco, Huacachi near Muña. El. 1950 m. MAY-JUN 1923. Macbride 3872 (holotype: F 534935; isotype: ILL).
- microphyllophora Trel. & Yuncker, Piperaceae no. S. Amer. 2: 577, fig. 501. 1950. TYPE: Colombia, Santander, vicinity of Charta. El. 2000 m. 1-11 FEB 1927. Killip & Smith 19016 (holotype: GH; isotype: ILL).
- mollipubis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 335. 1938. TYPE: Honduras, Comayagua, near El Achote, above the plains of Siguatepeque. El. 1350 m. 7 AUG 1936. Yuncker, Dawson & Youse 6367 (holotype: ILL).

- * moncionis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 26. 1931. TYPE: Santo Domingo [Dominican Republ.], Monte Cristi, Lagunas de Cenobí, Monción. El. 1100 m. 17 JUN 1929. Ekman 12886 (holotype, or LECTOTYPE designated herein: ILL).
- * montazosana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 26. 1931. TYPE: Santo Domingo [Dominican Republ.], La Vega, Los Montazos, Valle Nuevo Road, Constanza. El. 2000 m. 21 OCT 1929. Ekman 13888 (holotype, or LECTOTYPE designated herein: ILL).
- montefrionis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 17, 23 (as montefrioni). 1926. TYPE: Cuba, Oriente, Sierra Maestra, Monte Frío. El. 1000 m. 19 APR 1915. Ekman 5598 (holotype: ?; fragments of the type at ILL).-- [= P. penicillata C.DC. in Urban (fide Yuncker, 1950-51)]
- montis-verticis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 336. 1938. TYPE: Honduras, Comayagua, cloud zone above El Achote, near Siguatepeque. El. 1850 m. 1 AUG 1936. Yuncker, Dawson & Youse 6244 (holotype: ILL).
- munyecoana Trel., Contr. U.S. Nat. Herb. 26(4): 197. 1929. TYPE: Costa Rica, Cartago, El Muñeco, Río Navarro. El. 1400-1500 m. 6, 7 MAR 1926. Standley & Torres 51754 (holotype: US 1251352; isotype: ILL; paratype at ILL: Standley & Valerio 47216).-- [= P. angularis C.DC. in DC. (fide Burger, 1971)]
- murispica Trel. ex Badillo, Cat. Fl. Venezolana 1: 245. 1945 (nomen nudum). TYPE: Venezuela, Tovar de Aragua. El. 2100-2200 m. Pittier 10009 (holotype: ?; fragments of the type at ILL).-- [= P. ?blanda (fide Trel. & Yuncker, 1950; Yuncker, 1955, 1957, 1966 and 1974)]
- muscipara Trel. & Yuncker, Piperaceae no. S. Amer. 2: 731, fig. 654. 1950. TYPE: Colombia, Cauca, "La Gallera", Micay Valley. El. 2200-2600 m. 29-30 JUN 1922. Killip 8005 (holotype: US 1142461; isotype: ILL).
- muscotecta Trel. in Standley, Field Mus. Publ. Bot. 18(4): 1545. 1938. TYPE: Costa Rica, Sarapiquí, Vara Blanca. El. 1800 m. Skutch 3369 (holotype: US; fragments of the type at ILL).-- [= P. pittieri C.DC. (fide Burger, 1971)]
- mutilata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 26. 1926. TYPE: Cuba, Oriente, La Prenda. JUL 1922. Hioram 6336 (holotype: NY; fragments of the type at ILL).-- [This species recognized by Yuncker, 1950-51]

- myrtifolia (Vahl) A. Dietr. var. major Trel. in Questel, Fl. St. Bartholomew 94. 1941 (without a Latin diagnosis); Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 59. 1948. TYPE: St. Barthélémy. Questel 803 (holotype: NY; fragments of the type at ILL).--
[= P. myrtifolia (fide Howard, 1973)]
- naevifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 65. 1936. TYPE: Peru, Junín, Huacapistana. El. 1800 m. 6 JUN 1929. Killip & Smith 24278 (holotype: US; isotype: ILL).
- nebuligaudens Trel. in Yuncker, Field Mus. Publ. Bot. 17: 336. 1938. TYPE: Honduras, Comayagua, cloud region above El Achote, near Siguatepeque. El. 1850 m. 28 JUL 1936. Yuncker, Dawson & Youse 6186 (holotype: ILL).
- * negotiosa Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited); validly published in op. cit. 2(2): 60. 1948. TYPE: Guadeloupe, Ravine Chaude de Dugommier. El. 650-800 m. Stehlé, Stehlé & Quentin 1613 (holotype, or LECTOTYPE designated herein: NY; fragments of the type at ILL).--
[= P. urocarpa (fide Howard, 1973)]
- nequejahuirana Trel., Bull. Torrey Bot. Club 55: 169. 1928. TYPE: Bolivia, Nequejahuirana. El. 8000 ft. 1926. Tate 642 (holotype: NY; fragments of the type at ILL).-- [This species recognized by Yuncker, 1955]
- nievecitana Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 304. 1940. TYPE: Panama, Bocas del Toro, vicinity of Nievecita. El. 0-50 m. 8-19 AUG 1938. Woodson, Allen & Seibert 1865 (holotype: ILL).-- [This species recognized by Yuncker, 1950]
- nigricans Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 65. 1936. TYPE: Peru, Junín, La Merced. El. 700 m. MAY-JUN 1929. Killip & Smith 23674 (holotype: US; isotype: ILL).
- non-hispidula Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 67. 1936. TYPE: Peru, Lima, Lurín. El. 60 m. 23 SEP 1923. Macbride 5967 (holotype: F 536971; isotype: ILL).-- [This species recognized and regarded as closely related to P. mandonii by Yuncker, 1974]
- novae-helvetiae Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 304. 1940. TYPE: Panama, Chiriquí, vicinity of "New Switzerland," central valley of Río Chiriquí Viejo. El. 1800-2000 m. 6-14 JAN 1939. Allen 1417 (holotype: ILL).-- [= P. pascuicola C.DC. (fide Yuncker, 1950)]

novella Trel. in Yuncker, Field Mus. Publ. Bot. 17: 336. 1938.
TYPE: Honduras, Comayagua, cloud zone above El Achote, near Siguatopeque. El. 1800 m. 28 JUL 1936. Yuncker, Dawson & Youse 6139 (holotype: ILL).

nudicaulis C.DC., Bull. Torrey Bot. Club 19: 48. 1892. TYPE: Bolivia, near Yungas. 1890. Bang 331a [holotype: NY (fide Yuncker); isotype (obtained from GH): ILL].-- [This species recognized by Yuncker, 1955]

* nummularia Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 26. 1926. TYPE: Cuba, Pinar del Río, San Juan y Martínez, Río San Juan. 15 NOV 1923. Ekman 18083 (LECTOTYPE designated herein: ILL; isolectotype: ILL).-- [This species recognized by Yuncker, 1950-51]

obex Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 67. 1936. TYPE: Peru, Huánuco, Muña. El. 7000 ft. MAY-JUN 1923. Macbride 3992 (holotype: F 535056; isotype: ILL).

oblancealimba Trel. ex Badillo, Cat. Fl. Venezolana 1: 245. 1945 (nomen nudum). TYPE: Venezuela, Tovar de Aragua. El. 1800-2000 m. Allart 485 (holotype: ?; fragments of the type at ILL).-- [= P. acuminata (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51 and 1974)]

oblanceolata Trel. var. glabra Yuncker, Revista Soc. Cub. Bot. 6(2-3): 36. [1949] 1951. TYPE: Cuba, Oriente, Las Ninfas, Guantánamo. 19 SEP 1918. Hioram 2231 (holotype: NY; paratype at ILL: Ekman 14733).

oblongibacca C.DC. ex Schroeder var. subvillosa Yuncker, Ann. Missouri Bot. Gard. 37: 106. 1950. TYPE: Panama, Canal Zone, near Río Medio. 11 FEB 1937. Miller 1740 (holotype: US; fragments of the type at ILL).-- [= P. macrostachya (Vahl) A. Dietr. (cf. Burger, 1971)]

obovalis Trel. & Yuncker ex Hodge, Rev. Fac. Nac. de Agron. Medellín 8: 424. 1948 (nomen nudum); validly published in Piperaceae no. S. Amer. 2: 630, fig. 551. 1950. TYPE: Colombia, Chocó, Río San Juan, vicinity of Palestina. El. 5-50 m. 12-14 MAR 1944. Cuatrecasas 16906 (holotype: US 1852511; paratypes at ILL: Cuatrecasas 13711, 16945; Killip 34829).

obruenda Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 68. 1936. TYPE: Peru, Junín, Hacienda Chalhupapuquio. 8 DEC 1924. Stevens 202 (holotype: ILL).

- * ocoana Ekman ex Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 26. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, Bejucal, S. José de Ocoa. El. 1300 m. 10 MAR 1929. Ekman 11861 (holotype, or LECTOTYPE designated herein: ILL).
- okarana Trel., Bull. Torrey Bot. Club 55: 170. 1928. TYPE: Bolivia, Okara. El. 7500 ft. 1926. Tate 970 (holotype: NY; fragments of the type at ILL).-- [= P. galioides (fide Yuncker, 1955)]
- olafiana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 320, 328. 1927. TYPE: Haiti, Massif de la Hotte, Torbec. El. 1700 m. 1925. Ekman 5319 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 2522).-- ["A habit replica of the Jamaican P. swartziana" (Trel., loc. cit.)]
- olivacea C.DC. var. perlongispica Trel., Contr. U.S. Nat. Herb. 26(4): 221. 1929. TYPE: Costa Rica, San José, near Quebradillas, about 7 km N of Santa María de Dota. El. 1800 m. 24 DEC 1925. Standley 43368 (holotype: US 1251171; isotype: ILL; paratypes at ILL: Standley 41646; Standley & Valerio 43367).-- [This species recognized by Burger, 1971]
- opaca Trel. (nom. invalid.) var. ciliata Trel. in Yuncker, Field Mus. Publ. Bot. 17: 336. 1938. TYPE: Honduras, Comayagua, cloud zone above El Achote, near Siguatepeque. El. 1850 m. 28 JUL 1936. Yuncker, Dawson & Youse 6187 (holotype: ILL; paratypes at ILL: Yuncker, Dawson & Youse 6008, 6078 and 6366).-- [The specific epithet was published only in this varietal combination; = P. reflexa (fide Standley & Steyerf., 1952); = P. tetraphylla (cf. Yuncker, 1962, 1974)]
- orientalis Trel., Contr. U.S. Nat. Herb. 26(4): 211. 1929. TYPE: Costa Rica, Limón, La Colombiana Farm. El. 70 m. 6, 7 MAR 1924. Standley 36943 (holotype: US 1229274; paratype at ILL: Standley & Valerio 49013).-- [= P. macrostachya (fide Burger, 1971)]
- osana Trel. in Standley, Field Mus. Publ. Bot. 18(4): 319. 1937. TYPE: Costa Rica, Puntarenas, peninsula of Osa, Río Sándalo. At sea level. 1936. Dodge & Goerger 10079 (holotype: MO; isotype: ILL; paratype at ILL: Dodge & Goerger 9958).-- [= P. serpens (Sw.) Loud. (fide Burger, 1971)]

oscarii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 656, fig. 574. 1950. TYPE: Colombia, Santander, vicinity of Barranca Bermeja, etc. El. 100-500 m. 11 OCT 1934. Haught 1391 [holotype: US 1592005; paratypes at ILL: Killip 11716, 11718 (fragments)].

otoni Trel. in Standley, Field Mus. Publ. Bot. 18(4): 319. 1937. TYPE: Costa Rica, Guanacaste, Hacienda Santa María. El. 720-850 m. 17 JAN 1930. Dodge, Jimenez & Thomas 7768 (holotype: GH; isotype: ILL).-- [= P. peltilimba C.D.C. ex Trel. (fide Burger, 1971)]

ovato-lanceolata Trel. & Yuncker, Piperaceae no. S. Amer. 2: 701, fig. 623. 1950. TYPE: Colombia, El Valle, Río Digua Valley, Chorrera La Elsa. El. 975 m. 2, 3 APR 1939. Killip 34808 (holotype: US 1771599; isotype: ILL; paratype at ILL: Cuatrecasas 13035).-- [This species recognized by Yuncker, 1955a]

pachiteana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 69. 1936. TYPE: Peru, Huánuco, Puerta Lira, on Río Pachitea. El. 300 m. 23 JUL 1929. Killip & Smith 26831 (holotype: US; isotype: ILL).

palmana C.D.C. var. pseudo-oxystachya Trel., Contr. U.S. Nat. Herb. 26(4): 221. 1929. TYPE: Costa Rica, Heredia, Yerba Buena above San Isidro. El. 200 m. FEB 1926. Standley & Valerio 49222 (holotype: US 1251497; paratype at ILL: Standley & Valerio 49115).-- [Cited with the species by Burger, 1971]

palmana var. valerionum Trel. in Standley, Field Mus. Publ. Bot. 18(4): 320. 1937. TYPE: Costa Rica, Heredia, Cerro Central de Zurquí. El. 1600-1700 m. Dodge, Valerio, Thomas & Valerio 6146 (holotype: GH; isotype: ILL).

palpebrata Trel. ex Stehlé, Bull. Soc. Bot. France 84: 409. 1937 (without a Latin diagnosis); Candollea 8: 81. 1940. TYPE: Martinique, Sources de Didier. Stehlé & Stehlé 984 (cited in 1940 wrongly as "n. 894") [holotype: ILL; paratypes at ILL: Stehlé & Stehlé 1008, 2141 (= fragments), 2338, 3235, 3373, 3385, 3387].-- [= P. nigropunctata (fide Howard, 1973)]

palpebrata var. absalonis Trel. ex Stehlé, Bull. Soc. Bot. France 85: 577. 1938 (without a Latin diagnosis). TYPE: Martinique, Fontaine Absalon. El. 450 m. Stehlé & Stehlé 2169 (holotype: ?; fragments of the type at ILL).-- [= P. nigropunctata (fide Howard, 1973)]

- * palpebrata var. lata Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 63. 1948 (nomen nudum). TYPE: Martinique, Fonds ... aux Deux-Choux. El. 680 m. 29 APR 1939. Stehlé & Stehlé 3248 (holotype, or LECTOTYPE designated herein: ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- palpebrata var. major Trel. ex Stehlé, Bull. Soc. Bot. France 85: 578. 1938 (without a Latin diagnosis). TYPE: Martinique, Pont d l'Alma ed le long de la Rivière Blanche. El. 350 m. Stehlé & Stehlé 2193 (holotype: NY; fragments of type at ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- pampalcana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 69. 1936. TYPE: Peru, Ayacucho, Pampalca. El. 3200 m. MAY 1929. Killip & Smith 23282 (holotype: US; isotype: ILL).
- * papulata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 26. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, Picacho del Ingenito, San Juan. El. 1200 m. 8 SEP 1929. Ekman 13517 (holotype, or LECTOTYPE designated herein: ILL).
- parietariaefolia Trel., Contr. U.S. Nat. Herb. 26(2): 45. 1927. TYPE: Panama, Chiriquí, valley of the Río Caldera, between El Boquete and the cordillera. El. 1400-1600 m. 5-19 FEB 1918. Killip 3520 (holotype: US 1266032; isotype: ILL).-- [This species recognized by Yuncker, 1950; = P. elata C.DC. ex Schroeder (fide Burger, 1971)]
- parmata Trel., Contr. U.S. Nat. Herb. 26(4): 212. 1929. TYPE: Costa Rica, Cartago, along the Río Turrialba. El. 500 m. MAR 1894. Donnell Smith 4926 (holotype: US 796648; paratype at ILL: Standley & Valerio 44103).-- [= P. maculosa (fide Burger, 1971)]
- parva Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 70. 1936. TYPE: Peru, Junín, Pichis Trail, Dos de Mayo. El. 1700-1900 m. 2, 3 JUL 1929. Killip & Smith 25881 (holotype: US; isotype: ILL).
- parvipunctulata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 70. 1936. TYPE: Peru, San Martín, San Roque. El. 1350-1500 m. JAN-FEB 1930. Williams 7145 (holotype: F 623573; isotype: ILL).
- peltaphylla Trel. & Yuncker, Piperaceae no. S. Amer. 2: 719, fig. 641. 1950. TYPE: Colombia, Santander, vicinity of El Roble. El. ca 1500 m. 16 FEB 1927. Killip & Smith 19364 (holotype: US 1354620; isotype: ILL).

- penicillata C.DC. var. magnifolia C.DC. in Urban, Symb. Ant. 7: 190. 1912. TYPE: Jamaica, John Crow Park. 1906. Johnson 8 (holotype: NY; isotype: ILL).-- [The species recognized by Adams et al., 1972 and Yuncker, 1950-51]
- pennellii Trel. & Yuncker, Piperaceae no. S. Amer. 2: 608, fig. 533. 1950. TYPE: Colombia, Norte de Santander, vicinity of Toledo. El. 1700-1900 m. 3-11 MAR 1927. Killip & Smith 20049 (holotype: US 1355192; isotype: ILL; paratypes at ILL: Colombia: Arbeláez & Cuatrecasas 8108; Cuatrecasas 18284, 19568; Daniel 2124; Haught 4111; Killip & García 33696; Killip & Smith 15208, 15316, 15345, 16558, 17078 in part, 20082, 20170; Pennell 9294; Ecuador: Rimbach 267).-- [This species recognized by Yuncker, 1955a; = affin. P. angularis (cf. Burger, 1971)]
- pentadactyla Yuncker, Lilloa 27: 283, pl. 164. [1953] 1955. TYPE: Bolivia, La Paz, San Carlos, vicinity of Mapiro. El. 800 m. 1 DEC 1926. Buchtien 637 (holotype: ILL).
- percrassicaulis Trel. in Feddes Repert. Spec. Nov. Regni Veg. 25: 54. 1928. TYPE: Haiti, La Selle, Pétienville, Morne La Visite. El. 1800 m. 11 APR 1927. Ekman 7993 [holotype: ?; isotype: ILL (perhaps this is the holotype?)].
- pereneana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 72. 1936. TYPE: Peru, Junín, Colonia Perené. El. 680 m. 14-25 JUN 1929. Killip & Smith 25413 (holotype: US; isotype: ILL).
- perherbacea Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 318, 325. 1927. TYPE: Haiti, Gros Morne. El. 400 m. 10 OCT 1925. Ekman 5052 (holotype: ?; isotype: ILL).
- perherbacea var. oligocenica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 24: 360. 1928. TYPE: Haiti, Massif du Nord, Oligocene limestone on M. Pedregal. El. 400 m. 24 JUN 1926. Ekman 6435 (holotype: ?; isotype: ILL).
- * perherbacea var. picachoana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 27. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, San Juan, Picacho del Ingenito. El. 1400 m. 8 SEP 1929. Ekman 13522 (holotype, or LECTOTYPE designated herein: ILL).
- perlongicaulis Yuncker, Bol. Inst. Bot. (São Paulo) 3: 165, fig. 146. 1966. TYPE: Brazil, Paraná, Jacareí. 27 SEP 1908. Dusén 6655 (holotype: S; isotype: ILL).-- [This species upheld by Yuncker, 1974]

- perlongispica Yuncker, Lilloa 27: 277, pl. 157. [1953] 1955.
TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo, near Coroico.
El. 1100 m. OCT-NOV 1912. Buchtien 3729 (holotype:
US 1176587; isotype: ILL).
- * perodiniana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23:
322, 330. 1927. TYPE: Haiti, Pérodin. El. 900 m. 1925.
Ekman 3411 (holotype, or LECTOTYPE designated herein: ILL;
paratype at ILL: Leonard 8993).
- perplexa Trel. ex Yuncker, Field Mus. Publ. Bot. 17: 337. 1938
(nomen nudum). TYPE LOCALITY: Honduras, "on tree near Lake
Yojoa, Department of Cortés, at 630 meters."-- no specimen
cited. (Authentic specimen with matching type information
at ILL: Yuncker 4865).
- persulcata Yuncker ex Espinosa, Univ. Loja, Estud. Bot. Ecuador
2: 32. 1949 (nomen subnudum), in Trel. & Yuncker, Piperaceae
no. S. Amer. 2: 517, fig. 456. 1950. TYPE: Ecuador, Loja,
Horta-Naque. El. 3500 m. 8 NOV 1946. Espinosa 962
(holotype: ILL).
- pertomentella Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 73. 1936. TYPE: Peru, San Martín, Río Mayo,
Tarapoto. El. 360-900 m. DEC 1929. Williams 6202
(holotype: F 623588; paratype at ILL: Williams 6204).
- petenensis Trel. var. hondurensis Trel. in Yuncker, Field Mus.
Publ. Bot. 17: 337. 1938. TYPE: Honduras, Comayagua, El
Achote, above Siguatepeque. El. 1350 m. 17 JUL 1936.
Yuncker, Dawson & Youse 5922 (holotype: ILL).--
[= P. obtusifolia (cf. Standley & Steyerf., 1952)]
- petrophila C.DC. var. brevipetiola Trel. & Yuncker, Piperaceae
no. S. Amer. 2: 457, fig. 402. 1950. TYPE: Colombia,
Santander, vicinity of El Roble. El. ca 1500 m.
16 FEB 1927. Killip & Smith 19363 (holotype: US 1354619;
isotype: ILL).
- pichisensis Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 74. 1936. TYPE: Peru, Junín, Pichis Trail, Dos
de Mayo. El. 1700-1900 m. 2,3 JUL 1929. Killip & Smith
25829 (holotype: US; isotype: ILL).
- piedrana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 19,
27. 1926. TYPE: Cuba, Oriente, Gran Piedra. El. 700 m.
11 NOV 1916. Ekman 8274 (holotype: ?; isotype: ILL).--
[= P. guadaloupeensis C.DC in Seemann (fide Yuncker,
1950-51)]

- * pilipeduncula Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 27. 1931. TYPE: Santo Domingo [Dominican Republ.], La Vega, Constanza. El. 1300 m. 24 OCT 1929. Ekman 13907 (holotype, or LECTOTYPE designated herein: ILL).
- pinedoana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 75. 1936. TYPE: Peru, Junín, Río Pinedo, N of La Merced. El. 700-900 m. 30 MAY 1929. Killip & Smith 23620 (holotype: US; isotype: ILL).
- pitiguayana Trel., Bull. Torrey Bot. Club 55: 169. 1928. TYPE: Bolivia, La Paz, Unduavi River Valley, Pitiguaya. El. 5800 ft. 7-15 MAY 1926. Tate 722 (holotype: NY; fragments of the type at ILL).-- [This species recognized by Yuncker, 1955]
- playapampana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 75. 1936. TYPE: Peru, Huánuco, Playapampa. El. 2700 m. 16-24 JUN 1923. Macbride 4496 (holotype: F 535582; isotype: ILL).
- pleiomorpha Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 75. 1936. TYPE: Peru, Junín, Puerto Bermúdez. El. 375 m. 14-17 JUL 1929. Killip & Smith 26426 (holotype: US; isotype: ILL).
- plurispica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 76. 1936. TYPE: Peru, Huánuco, Cani near Mito. El. 2550 m. 16-26 APR 1923. Macbride 3414 (holotype: F 534485; isotype: ILL).
- pololensis Trel. ex Standley in Standley & Record, Field Mus. Publ. Bot. 12: 406. 1936. TYPE: Guatemala, Petén, Monte Polol. 26 APR 1933. Lundell 3040 (holotype: MICH; isotype: ILL; paratypes at ILL: Lundell 3100, 3102, 3830).-- [= P. glabella (fide Standley & Steyerl., 1952)]
- * polycephala Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 76. 1936. TYPE: Peru, Cuzco, Urubamba Valley, Gucay. El. 3000 m. JAN 1927. Herrera 1460 (holotype, or LECTOTYPE designated herein: ILL).
- polymorpha Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 77. 1936. TYPE: Peru, Ayacucho, Aina. El. 750-1000 m. 7, 17 MAY 1929. Killip & Smith 22774 (holotype: US; isotype: ILL).

polystachya (Aiton) Hooker var. godetiana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 319, 326. 1927. TYPE: Haiti, La Selle, Godet, Morne Tranchant. 4 SEP 1924. Ekman 1755 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 1239).-- [This species recognized by Adams et al., 1972; = P. affin. blanda (cf. Yuncker, 1974)]

pongoana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 77. 1936. TYPE: Peru, Loreto, Pongo de Manseriche, near mouth of Río Santiago. El. 400 m. 2 DEC 1931. Mexia 6210a (holotype: UC; isotype: ILL; paratype at ILL: Mexia 6196a).

pontina Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 77. 1936. TYPE: Peru, Junín, Río Paucartambo Valley, near Perené Bridge. El. 700 m. 19 JUN 1929. Killip & Smith 25366 (holotype: US; isotype: ILL).

porriginifera Trel. & Yuncker, Piperaceae no. S. Amer. 2: 572, fig. 496. 1950. TYPE: Colombia, Cauca, Río Palo Valley, between Tacueyó and La Tolda. El. 1780-1900 m. 19 DEC 1944. Cuatrecasas 19494 (holotype: US 1854407; isotype: ILL; paratype at ILL: Cuatrecasas 19501).

* porschiana Trel. in Cuf., Archivio Bot. Sist. Fitogeogr. & Genet. 10: 27. 1934. TYPE: Costa Rica, Vulcanus Poas. El. 22-2400 m. 26 APR 1930. Cufodontis 737 (LECTOTYPE, designated herein: ILL).-- [= P. hylophila (fide Burger, 1971)]

praematura Trel. & Yuncker, Piperaceae no. S. Amer. 2: 672, fig. 587. 1950. TYPE: Colombia, Santander, vicinity of Las Vegas. El. 2600-3000 m. 21-23 DEC 1926. Killip & Smith 16055 (holotype: GH; isotype: ILL).

praestigiatrix Trel. ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited); also publ. as P. stehleana Trel. ex Stehlé var. praestigiatrix Trel. & Stehlé in op. cit. 2(2): 49. 1948 (nomen nudum). TYPE: Guadeloupe, Dugommier. Stehlé & Stehlé 1619 (holotype: NY; isotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]

praetenuis Trel. ex Standley in Standley & Record, Field Mus. Publ. Bot. 12: 406. 1936. TYPE: Belize. 12 MAR 1933. Lundell 1929 (holotype: MICH; fragments of the type at ILL).-- [This species recognized by Standley & Steyerl., 1952]

praeteruentifolia Trel. in Yuncker, Field Mus. Publ. Bot. 17: 337. 1938. TYPE: Honduras, Comayagua, near Siguatepeque. El. 1050 m. 3 JUL 1936. Yuncker, Dawson & Youse 5614 (holotype: ILL).-- [This species recognized by Standley & Steyererm., 1952]

* productamenta Trel. in Feddes Repert. Spec. Nov. Regni Veg. 24: 360. 1928. TYPE: Haiti, cliffs between Cornillon and Thomazeau, Les Matheux. El. 700-900 m. 19 MAR 1926. Ekman 5773 (holotype, or LECTOTYPE designated herein: ILL).

profissa Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 78. 1936. TYPE: Peru, Junín, Hacienda Chahuapauquio. 8 DEC 1924. Stevens 193 (holotype: ILL).

propugnaculi Trel. in Feddes Repert. Spec. Nov. Regni Veg. 25: 54. 1928. TYPE: Haiti, Massif des Matheux, Morne Delpech. El. 1550 m. 14 NOV 1927. Ekman 9322 [isotype (or perhaps the holotype?): ILL].

pruinosisifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 78. 1936. TYPE: Peru, Lima, Río Blanco. El. 3000-3500 m. 15-17 APR 1929. Killip & Smith 21742 (holotype: US; isotype: ILL).

pseudo-alpina Trel., Contr. U.S. Nat. Herb. 26(4): 217. 1929. TYPE: Costa Rica, Alajuela, San Ramón, Colinas de Piedades. El. 1100-1200 m. Brenes 14180 (holotype: US 1080165; paratypes at ILL: Standley 41375, 41626).-- [This species recognized by Burger, 1971]

pseudoalternifolia Trel. & Yuncker, Piperaceae no. S. Amer. 2: 547, fig. 478. 1950. TYPE: Colombia, Caldas, Páramo del Quindío. El. 3500-3600 m. 15-20 AUG 1922. Pennell & Hazen 10083 (holotype: US 1142969; isotype: ILL).

pseudo-galapagensis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 79. 1936. TYPE: Peru, Lima, Lima. 1838-1842. Wilkes Expl. Exped. (holotype: GH; fragment of the type at ILL; paratype at ILL: Macbride 5920).-- [See also P. limaensis Trel. in op. cit. 58]

pseudo-hoffmannii Trel., Contr. U.S. Nat. Herb. 26(4): 225. 1929. TYPE: Costa Rica, Guanacaste, vicinity of Tilarán. El. 500-650 m. JAN 1926. Standley & Valerio 44198 (holotype: US 1251189; isotype: ILL; paratype at ILL: Standley & Valerio 45608).-- [= P. deppeana (fide Burger, 1971)]

- pseudo-salicifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 79. 1936. TYPE: Peru, Huánuco, Río Huallaga canyon below Santo Domingo. El. 1200 m. 3 JUN 1923. Macbride 4254 (holotype: F 535334; isotype: ILL).
- pseudo-tetraphylla Trel., Contr. U.S. Nat. Herb. 26(4): 224. 1929. TYPE: Costa Rica, Cartago, Finca Las Cóncavas. El. 1200-1300 m. 7, 8 DEC 1925. Standley 41488 (holotype: US 1251099; isotype: ILL; paratypes at ILL: Standley 41458, 42397, 42607; Standley & Valerio 43358).-- [= P. quadrifolia (fide Burger, 1971)]
- pseudo-tetraphylla var. dodgei Trel. in Standley, Field Mus. Publ. Bot. 18(4): 322. 1937. TYPE: Costa Rica, Cartago, Finca Coliblanco, s. slope of Volcán de Turrialba. El. 1980 m. 11 OCT 1929. Dodge 4715 (holotype: GH; isotype: ILL).
- pseudo-tetraphylla var. juvenalis Trel., Contr. U.S. Nat. Herb. 26(4): 224. 1929. TYPE: Costa Rica, San José, Cerro de las Vueltas. El. 2700-3000 m. DEC 1925. Standley & Valerio 44003 (holotype: US 1251181; isotype: ILL; paratype at ILL: Standley & Valerio 43694).-- [= P. quadrifolia (fide Burger, 1971)]
- pterocaulis Miq. var. filispica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20 (as forma), 28. 1926. TYPE: Cuba, Pinar del Río, Ballestina to Ranzel, Sierra de los Órganos. El. 600 m. 1922. Ekman 13771 (holotype: ?; isotype: ILL; paratype at ILL: Ekman 13894).-- [= P. alata (cf. Yuncker, 1950-51, 1957, 1966 and 1974)]
- * pterocaulis var. longispica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 27. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, San Juan. 1929. Ekman 13523 (holotype, or LECTOTYPE designated herein: ILL).-- [= P. alata (cf. Yuncker, 1950-51, 1957 and 1974)]
- * pterocaulis var. palmamochana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20, 28. 1926. TYPE: Cuba, Oriente, divide between Río Yara and Río Palmamocha, Sierra Maestra. El. 1100 m. 16 JUL 1922. Ekman 14334 (holotype, or LECTOTYPE designated herein: ILL; paratype at ILL: Ekman 14336).-- [= P. alata (cf. Yuncker, 1950-51, 1957, 1966 and 1974)]
- pterocaulis forma stipiticarpa Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20. 1926. TYPE: Cuba, Oriente, Sierra de Nipe. 20 JUL 1914. Ekman 2075 [isotype (or perhaps the holotype?): ILL].-- [= P. alata (cf. Yuncker, 1950-51, 1957, 1966 and 1974)]

puberulibacca C.DC. var. atricha Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 80. 1936. TYPE: Peru, Huánuco, Muña. El. 2100 m. MAY-JUN 1923. Macbride 4009 (holotype: F 535073; isotype: ILL).

puberulipes Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 80. 1936. TYPE: Peru, Huánuco, Piedra Grande near Río Santo Domingo. El. 1500 m. 14-19 MAY 1923. Macbride 3856 (holotype: F 534919; isotype: ILL).

pubescentinervis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 81. 1936. TYPE: Peru, Junín, Hacienda Chahuapauquio. 6 DEC 1924. Stevens 127 (holotype: ILL).

pubinervosa Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 81. 1936. TYPE: Peru, Junín, Río Paucartambo Valley, near Perené Bridge. El. 700 m. 19 JUN 1929. Killip & Smith 25769 (holotype: US; paratype at ILL: Killip & Smith 25269).

- * pullispica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 26: 341. 1929. TYPE: Haiti, Massif du Nord, Haut-Piton. El. 1000 m. 31 MAR 1928. Ekman 9832b (holotype, or LECTOTYPE designated herein: ILL).-- [Note by Trelease: "A xerophytic form of P. crassispica?"]

punctatilamina Trel. & Yuncker, Piperaceae no. S. Amer. 2: 586, fig. 510. 1950. TYPE: Colombia, El Valle, La Laguna. El. 1250-1400 m. 10-20 DEC 1943. Cuatrecasas 15406 (holotype: ILL).

punctulatissima Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 228. 1927. TYPE: Bolivia, cataracts of the Bopi River. El. 3000 ft. 11 AUG 1921. Rusby 592 (holotype: ILL).-- [This species recognized by Yuncker, 1955]

- * pustulatibacca Trel. & Stehlé in Stehlé, Candollea 10: 288. 1946; originally published as P. pustulaebacca Trel. ex Stehlé, Carib. For. 6, Suppl. 344. 1945 (nomen nudum). TYPE: Barbados. 4 APR 1937. Stehlé & Stehlé 1647 (LECTOTYPE, designated herein: NY; isolectotype: ILL).-- [= P. magnoliifolia (fide Howard, 1973)]

puteolata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 82. 1936. TYPE: Peru, Junín, Huacapistana. 6 DEC 1924. Stevens 66 (holotype: ILL; paratypes at ILL: Killip & Smith 24155, 24190).-- ["near P. tetragona" Ruiz & Pavón (fide Trelease's annotation on the type sheet)]

putumayoensis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 620, fig. 543. 1950. TYPE: Colombia, Putumayo, along Río Putumayo, Puerto Porvenir, etc. El. 230-250 m. 19 NOV 1940. Cuatrecasas 10675 (holotype: US 1798154; paratype at ILL: Haught 5412).

quadricoma Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 82. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1800 m. Schunke 370 (holotype: F 571424; fragment of the type at ILL).

* quadrivii Trel. in Feddes Repert. Spec. Nov. Regni Veg. 25: 54. 1928. TYPE: Haiti, Massif de la Hotte, Miragoane, Quatre Chemins. El. 1000 m. 31 OCT 1927. Ekman 9207 (holotype, or LECTOTYPE designated herein: ILL).

quaerata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 83. 1936. TYPE: Peru, Junín, Río Pinedo, N of La Merced. El. 700-900 m. 30 MAY 1929. Killip & Smith 23653 (holotype: US; isotype: ILL).

quaesita Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 83. 1936. TYPE: Peru, Junín, Puerto Bermúdez. El. 375 m. 14-17 JUL 1929. Killip & Smith 26676 (holotype: US; isotype: ILL).-- [This species recognized by Yuncker, 1955]

quatrometralis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 83. 1936. TYPE: Peru, Junín, Puerto Yessup. El. 400 m. 10-12 JUL 1929. Killip & Smith 26330 (holotype: US; isotype: ILL).

* questeliana Stehlé & Trel. in Stehlé, Candollea 8: 77. 1940. TYPE: Guadeloupe, chemin des Grands Fonds. El. 200 m. Questel 2518 (holotype, or LECTOTYPE designated herein: NY; paratypes at ILL: Questel 107, 801).-- [This species recognized by Howard, 1973; = P. humilis (fide Boufford, 1982)]

quimiriana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 83. 1936. TYPE: Peru, Junín, La Merced, E of Quimirí Bridge. El. 800-1300 m. 1-3 JUN 1929. Killip & Smith 23864 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 23730).

quindioensis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 555, fig. 486. 1950. TYPE: Colombia, Caldas, below Páramo del Quindío. El. 3500-3800 m. 15-20 AUG 1922. Pennell & Hazen 10082 (holotype: GH; isotype: ILL; paratype at ILL: Ecuador: Rimbach 259).

- quispicanchiana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 84. 1936. TYPE: Peru, Cuzco, Quispicanchi, Marcapata. 15-16 FEB 1929. Weberbauer 7802 (holotype: F 605156; isotype: ILL).
- ramosa Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 320, 327. 1927. TYPE: Haiti, La Selle, Morne Cabaio. El. 2250 m. 20 AUG 1924. Ekman 1575 (holotype: ?; isotype: ILL).
- redondoana Trel. in Standley, Field Mus. Publ. Bot. 18(1): 323. 1937. TYPE: Costa Rica, San José, Potrereros of Rancho Redondo. El. 2220-2600 m. NOV 1929. Dodge & Thomas 5423 (holotype: GH; isotype: ILL).-- [= P. galioides (fide Burger, 1971)]
- reflexa (L.f.) A. Dietr. var. itabirana C.DC., Bull. Herb. Boissier. Ser. 2. 1: 359. 1901. TYPE: Brazil, Minas Gerais, Pico de Itabira do Campo. El. 1560 m. 11 SEP 1887. Schwacke 5907 (holotype: ?; isotype: ILL).-- [= P. decora (fide Yuncker, 1974)]
- rejecta Trel., Contr. U.S. Nat. Herb. 26(4): 205. 1929. TYPE: Costa Rica, Heredia, Yerba Buena, above San Isidro. El. 2000 m. FEB 1926. Standley & Valerio 50219 (holotype: US 1251316; isotype: ILL; paratype at ILL: Standley & Valerio 50248).-- [= P. rotundifolia (fide Burger, 1971)]
- remyi C.DC. var. waipioana Yuncker, Bernice P. Bishop Mus. Bull. 112: 55, 56. 1933. TYPE: Hawaii, Waipio Valley. Rock 4646 (holotype: BISH; paratype at ILL: Degener, Pohina & Iwasaki 3885).-- [This variety recognized by Kartesz & Kartesz, 1980]
- retivenulosa Yuncker, Bol. Inst. Bot. (São Paulo) 3: 185, fig. 163. 1966. TYPE: Brazil, Paraná, Volta Grande, Marumbi. El. 700 m. 13 FEB 1904. Dusén 3709 (holotype: R; isotype: ILL).-- [This species upheld by Yuncker, 1974]
- retopuberula Yuncker, Lilloa 27: 184, pl. 64. [1953] 1955. TYPE: Bolivia, La Paz, San Carlos, vicinity of Mapiri. El. 850 m. 5 NOV 1926. Buchtien 628 (holotype: US 1399480; isotype: ILL).
- rhodophlebia Trel. in Yuncker, Field Mus. Publ. Bot. 17: 337. 1938. TYPE: Honduras, Cortés, near Potrerillos. 31 JUL 1934. Yuncker 4896 (holotype: ILL).
- rhodophylla Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 84. 1936. TYPE: Peru, Cuzco, Ollantaitambo. El. 2900-3100 m. Pennell 13654 (holotype: F 558031; fragments of the type at ILL).

rhombico-elliptica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 85. 1936. TYPE: Peru, Huánuco, Huacachi near Muña. El. 1950 m. MAY-JUN 1923. Macbride 4171 (holotype: F 535246; isotype: ILL).

rhombifolia Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 226. 1927. TYPE: Bolivia, La Paz, Bopi River Valley. El. 3000 ft. 11 SEP 1921. Rusby 581 (holotype: ILL).-- [This species recognized by Yuncker, 1955]

rhombilimba Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 86. 1936. TYPE: Peru, Ayacucho, Aina. El. 700-1000 m. 7, 17 MAY 1929. Killip & Smith 22564 (holotype: US; isotype: ILL).

rinconensis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 337. 1938. TYPE: Honduras, Comayagua, near El Rincón, about 10 miles W of Siguatepeque. El. 1400-1500 m. 24 JUL 1936. Yuncker, Dawson & Youse 6080 (holotype: ILL).

rio-albae Trel. in Standley, Field Mus. Publ. Bot. 18(4): 324. 1937. TYPE: Costa Rica, Río Alba, El Copey. El. above 1800 m. 24 JUN 1932. Stork 2986 (holotype: ILL).-- [= P. quadrifolia (fide Burger, 1971)]

rio-caliensis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 452, fig. 397. 1950. TYPE: Colombia, El Valle, Río Cali Valley between Puente de los Cápatos and La Margarita. El. ca 2000 m. 2 NOV 1944. Cuatrecasas 18467 (holotype: US 1854266; paratype at ILL: Killip & García 33776).

riparia Yuncker, Bol. Inst. Bot. (São Paulo) 3: 169, fig. 150. 1966. TYPE: Brazil, Minas Gerais, Dist. Ilheu, Faz. da Tabunha, Cachoeira do Munhin. El. 200 m. 27 AUG 1930. Mexia 5008 (holotype: BM; isotype: ILL).-- [This species upheld by Yuncker, 1974]

rivi-vetusti Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 304. 1940. TYPE: Panama, Chiriquí, vicinity of "New Switzerland," central valley of Río Chiriquí Viejo. El. 1800-2000 m. 6-14 JAN 1939. Allen 1360 (holotype: ILL).-- [= P. pascuicola (fide Yuncker, 1950); = P. angularis (fide Burger, 1971)]

robleana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 528, fig. 466. 1950. TYPE: Colombia, Santander, between El Roble and Tona. El. 1500-1900 m. 17 FEB 1927. Killip & Smith 19408 (holotype: US 1354659; isotype: ILL).

- roigana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 17, 24. AUG 1926, in Britton, Bull. Torrey Bot. Club 53: 459. OCT 1926. TYPE: Cuba, Pinar del Río, Sierra de Viñales, Mogote de la Bandera. 9 DEC 1923. Roig & Azcuy 2902 [holotype: ?; isotype: ILL; paratypes at ILL: Ekman 16539a (2 sheets), 16640].-- [= P. verticillata (L.) A. Dietr. (fide Yuncker, 1950-51)]
- romaensis Trel. in Yuncker, Field Mus. Publ. Bot. 9: 275. 1940. TYPE: Honduras, Atlántida, Roma siding of S.F. Co. R.R., E of La Ceiba. El. 360 m. 21 JUL 1938. Yuncker, Koepper & Wagner 8585 (holotype: ILL).-- [= P. obtusifolia (fide Standley & Steyerf., 1952)]
- roqueana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 86. 1936. TYPE: Peru, San Martín, San Roque. El. 1350-1500 m. JAN-FEB 1930. Williams 7635 (holotype: F 629588; isotype: ILL; paratypes at ILL: Williams 7272, 7382).-- [= P. martiana Miq. (fide Yuncker, 1974)]
- rosea Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 86. 1936. TYPE: Peru, Huánuco, Muña. El. 2100 m. MAY-JUN 1923. Macbride 3927 (holotype: F 534989; isotype: ILL).
- * rotundifolia (L.) Kunth var. subelliptica Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18. 1926 (nomen nudum). TYPE: Cuba, Pinar del Río, Mameyar. 13 SEP 1922. Ekman 17511 (holotype, or LECTOTYPE designated herein: ILL).-- [= P. rotundifolia var. rotundifolia (fide Trel. & Yuncker, 1950; Yuncker, 1950, 1950-51, 1955, 1957 and 1974)]
- rubefacta Trel. in Yuncker, Field Mus. Publ. Bot. 17: 338. 1938. TYPE: Honduras, Comayagua, El Rincón, W of Siguatepeque. El. 1400-1500 m. 24 JUL 1936. Yuncker, Dawson & Youse 6081 (holotype: ILL).-- [= P. glabella (fide Standley & Steyerf., 1952)]
- rubefacta var. cangrejalana Trel. in Yuncker, Field Mus. Publ. Bot. 9: 276. 1940. TYPE: Honduras, Atlántida, slopes of Mt. Cangrejal. El. 330 m. 30 JUL 1938. Yuncker, Koepper & Wagner 8737 (holotype: ILL; paratype at ILL: Yuncker, Koepper & Wagner 8775).-- [= P. glabella (fide Standley & Steyerf., 1952)]
- rubefacta var. reducta Trel. in Yuncker, Field Mus. Publ. Bot. 9: 276. 1940. TYPE: Honduras, Atlántida, along Danto River, slopes of Mt. Cangrejal. El. 300-330 m. 30 JUL 1938. Yuncker, Koepper & Wagner 8736 (holotype: ILL; paratypes at ILL: Yuncker, Koepper & Wagner 8510, 8735).

rubens Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 86. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1200 m. Schunke 353 (holotype: F 571407; fragments of the type at ILL).

rubramenta Trel. & Yuncker, Piperaceae no. S. Amer. 2: 450, fig. 396. 1950. TYPE: Colombia, Santander, Monte Osuro, SE of Puerto Berrio. El. 100 m. 17 JUL 1939. Haught 2862 (holotype: US 1707368; isotype: ILL; paratype at ILL: Haught 1599).

rubricaulis (Nees) A. Dietr. var. parvifolia Yuncker, Bol. Inst. Bot. (São Paulo) 3: 171, fig. 152. 1966. TYPE: Brazil, Santa Catarina, Ilha de Santa Catarina, etc. 28 MAR 1957. Smith & Reitz 12278 (holotype: US 2370557; paratype at ILL: Loefgren 3065).-- [This variety recognized by Yuncker, 1974]

rubrifolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 88. 1936. TYPE: Peru, Junín, Schunke Hacienda, above San Ramón. El. 1400-1700 m. 8-12 JUN 1929. Killip & Smith 24664 (holotype: US; isotype: ILL; paratype at ILL: Killip & Smith 25937).

* rubripetiola Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 27. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, Cordillera de Neyba, S. Juan. El. 1425 m. 1929. Ekman 13485 (holotype, or LECTOTYPE designated herein: ILL).

rufispica Yuncker, Bol. Inst. Bot. (São Paulo) 3: 172, fig. 153. 1966. TYPE: Brazil, Minas Gerais, Viçosa, road to São Miguel. El. 700 m. 21 OCT 1930. Mexia 5200 (holotype: ILL).-- [This species upheld by Yuncker, 1974]

rugata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 89. 1936. TYPE: Peru, Junín, La Merced, E of Quirimí Bridge. El. 800-1300 m. 1-3 JUN 1929. Killip & Smith 23823 (holotype: US; isotype: ILL).

rurrenabaqueana Trel. in Rusby, Mem. N.Y. Bot. Gard. 7: 226. 1927. TYPE: Bolivia, Beni, vicinity of Rurrenabaque. El. 1000 ft. 6 OCT 1921. Rusby 794 (holotype: ILL).-- [This species recognized by Yuncker, 1955; = P. nematostachya Link (fide Yuncker, 1957 and 1974)]

sachatzinzumba Trel. & Yuncker, Piperaceae no. S. Amer. 2: 694, fig. 612. 1950. TYPE: Ecuador, Napo-Pastaza, near Canelos. El. 300-400 m. 5-11 FEB 1935. Mexia 6868 (holotype: US 1619090; isotype: ILL).

saligna Kunth var. majuscula Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 580. 1950. TYPE: Colombia, El Valle, Río Bugalagrande Valley, Barragán, etc. El. 3450-3520 m. 20 MAR 1946. Cuatrecasas 20216 (holotype: US 1900420; paratype at ILL: Cuatrecasas 18819).

salmonicolor Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 90. 1936. TYPE: Peru, San Martín, San Roque. El. 1350-1500 m. Williams 7329 (holotype: F 624523; fragments of the type at ILL).

salmonicolor var. viridis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 91. 1936. TYPE: Peru, San Martín, San Roque. El. 1350-1500 m. Williams 7258 (holotype: F 629593; fragments of the type at ILL).

san-buenaventurana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 91. 1936. TYPE: Peru, Lima, San Buenaventura. El. 2700 m. Pennell 14566 (holotype: PH; fragments of the type at ILL).

* san-juanana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 29: 28. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, San Juan, Picacho del Ingenito. El. 1400 m. 1929. Ekman 13524 (holotype, or LECTOTYPE designated herein: ILL).

sanquiniana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 638, fig. 561. 1950. TYPE: Colombia, El Valle, Río Sanquiní Valley, La Laguna. El. 1250-1400 m. 10-20 DEC 1943. Cuatrecasas 15657 (holotype: US 1853187; isotype: ILL; paratype at ILL: Cuatrecasas 18255).

santanana Trel. in Standley, Field Mus. Publ. Bot. 18: 325. 1937. TYPE: Costa Rica, San José, Finca Santana. Dodge & Goerger 10476 (holotype: MO; fragments of the type at ILL).-- [= P. cooperi C.D.C. (fide Burger, 1971)]

santanderana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 742, fig. 666. 1950. TYPE: Colombia, Santander, upper Río Lebrija Valley, NW of Bucaramanga. El. 400-700 m. 29 DEC 1926. Killip & Smith 16282 (holotype: US 1352031; isotype: ILL; paratype at ILL: Killip & Smith 16199).

santiagoana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 92. 1936. TYPE: Peru, Loreto, Río Santiago, above Pongo de Manseriche. El. 200 m. 23 NOV 1931. Mexia 6146 (holotype: UC; isotype: ILL).

- sarcodes Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 304. 1940. TYPE: Panama, Chiriquí, trail from Cerro Punta to headwaters of Río Caldera. El. 2250-2500 m. 14 JAN 1939. Allen 1452 (holotype: ILL).-- [= P. adscendens (fide Trel. & Yuncker, 1950 and Yuncker, 1950); = P. acuminata (fide Burger, 1971)]
- sarcostachya Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 92. 1936. TYPE: Peru, Loreto, Santa Rosa. El. 135 m. 1-5 SEP 1929. Killip & Smith 28889 (holotype: US; isotype: ILL).
- sarcostachya var. repens Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 92. 1936. TYPE: Peru, Junín, Río Paucartamba Valley, near Perené Bridge. El. 700 m. 19 JUN 1929. Killip & Smith 25307 (holotype: US; isotype: ILL).
- scabiosa Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 92. 1936. TYPE: Peru, Huánuco, Piedra Grande near Río Santo Domingo. El. 1500 m. 14-19 MAY 1923. Macbride 3857 (holotype: F 534920; isotype: ILL).
- scandens Ruiz & Pavón var. longispica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 93. 1936. TYPE: Peru, Loreto, Balsapuerto. El. 150-350 m. 28-30 AUG 1929. Killip & Smith 28382 (holotype: US; isotype: ILL).-- [= P. serpens (cf. Trel. & Yuncker, 1950; Yuncker, 1955, 1974)]
- scheryi Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 28: 426. 1941. TYPE: Panama, Chiriquí, Quebrada Velo. El. 1800 m. 8 JUL 1940. Woodson & Schery 247 (holotype: ILL).-- [= P. maculosa (fide Yuncker, 1950)]
- schunkeana Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 94. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1200 m. Schunke 342 (holotype: F 571398; paratype at ILL: Killip & Smith 24526).
- * scopulorum Trel. in Feddes Repert. Spec. Nov. Regni Veg. 25: 54. 1928. TYPE: Haiti, Ile la Gonave, cliffs of the Grande Ravine. El. 450 m. 1927. Ekman 8790 (holotype, or LECTOTYPE designated herein: ILL).
- scutilimba Yuncker, Lilloa 27: 275, pl. 154. [1953] 1955. TYPE: Bolivia, La Paz, Tipuani. El. 500 m. NOV 1933. Cárdenas 1336 (holotype: ILL).

- seibertii Trel. in Woodson & Seibert, Ann. Missouri Bot. Gard. 24: 185. 1937. TYPE: Panama, Chiriquí, valley of the upper Río Chiriquí Viejo, vicinity of Monte Lirio, Bugava Distr. El. 1300-1900 m. JUN-JUL 1935. Seibert 201 (holotype: MO; isotype: ILL).-- [This species recognized by Yuncker, 1950; = P. elata (fide Burger, 1971)]
- semi-decurrrens Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20, 29. 1926. TYPE: Cuba, Pinar del Río, on cliffs, Cerro de Mendoza. El. 150 m. 16 JUN 1923. Ekman 16740 (holotype: ?; isotype: ILL).-- [= P. erythropremna (fide Yuncker, 1950-51)]
- semielongata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 95. 1936. TYPE: Peru, Junín, La Merced, Hacienda Schunke. El. 1200 m. AUG-SEP 1923. Macbride 5644 [holotype: F 536682; isotype: ILL (this collection is also the type of P. crotalophora Trel. in J.F. Macbr., op. cit. 34); paratype at ILL: Killip & Smith 24683].-- [= P. crotalophora (fide Trel. & Yuncker, 1950)]
- seposita Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 96. 1936. TYPE: Peru, Junín, Hacienda Chalhuapuquio. 8 DEC 1924. Stevens 213 (holotype: ILL).
- siguaneana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 25. 1926. TYPE: Cuba, Sta. Clara, Lomas de Siguanea, Río Navarro. 1922. Ekman 13890 (holotype: ?; isotype: ILL).-- [= P. hirta (fide Yuncker, 1950-51)]
- siguatepequensis Trel. in Standley, Field Mus. Publ. Bot. 8: 5. 1930. TYPE: Honduras, Comayagua, Siguatepeque. El. 1100 m. FEB 1928. Standley 56534 (holotype: F 580969; isotype: ILL).
- simulatio Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 305. 1940. TYPE: Panama, Chiriquí, vicinity of Casita Alta, Volcán de Chiriquí. El. 1500-2000 m. JUN-JUL 1938. Woodson, Allen & Seibert 895 (holotype: ILL).-- [= P. leucosticta (fide Yuncker, 1950)]
- smithii Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 96. 1936. TYPE: Peru, Loreto, Yurimaguas to Balsapuerto. El. 135-150 m. 26-31 AUG 1929. Killip & Smith 28115 (holotype: US; isotype: ILL).
- socorronis Trel. ex I.M. Johnston, Proc. Cal. Acad. Sci. 20: 58. 1931. TYPE: Mexico, Socorro Island, near summit of Mt. Evermann. 8 MAY 1925. Mason 1653 (holotype: CAS; isotype: ILL).

- spiculata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 97. 1936. TYPE: Peru, Junín, Chanchamayo Valley. Schunke 352 (holotype: F 571406; isotype: ILL).
- spiculata var. elliptica Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 97. 1936. TYPE: Peru, Junín, Chanchamayo Valley. Schunke 388 (holotype: F 571442; fragments of the type at ILL).
- staminea Trel., J. Wash. Acad. Sci. 19: 328. 1929. TYPE: Honduras, Atlántida, Lancetilla Valley, near Tela. El. 100 m. 16 JAN 1928. Standley 54614 (holotype: F 583590; isotype: ILL).-- [This species recognized by Standley & Steyerl., 1952; = P. emiliana (fide Burger, 1971)]
- standleyi Trel. in Standley, J. Wash. Acad. Sci. 13: 366. 1923. TYPE: El Salvador, San Salvador, vicinity of Tonacatepeque. 30 DEC 1921. Standley 19426 (holotype: ILL).-- [= P. quadrifolia (fide Standley & Steyerl., 1952)]
- stehleana Trel. ex Stehlé, Bull. Soc. Bot. France 83: 627. 1936 (nomen subnudum); Candollea 8: 79. 1940. TYPE: Guadeloupe, Forêt des Bains-Jaunes. El. 600-1050 m. Stehlé & Stehlé 25 (holotype: NY; fragments of the type at ILL; paratypes at ILL: Stehlé & Stehlé 368, 1335, 1342, 1343, 1349).-- [= P. nigropunctata (fide Howard, 1973)]
- * stehleana var. charpentieri Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 49, 50(fig. 1). 1948 (nomen nudum, but with illustration). TYPE: Guadeloupe. Stehlé & Charpentier 2551 (holotype, or LECTOTYPE designated herein: NY; fragments of the type at ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- stehleana var. tardenaevifera Trel. ex Stehlé, Bull. Soc. Bot., France 83: 628. 1936 (nomen subnudum), ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited). TYPE: Guadeloupe. Stehlé & Stehlé 336 (holotype: NY; isotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- * stehleana var. tardigranulata Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(1): 3. 1937 (nomen nudum, but type cited). TYPE: Guadeloupe, Malanga. El. 680 m. Stehlé & Stehlé 1752 (holotype, or LECTOTYPE designated herein: NY; isotype or isolectotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]

* stehleana var. variifolia Trel. & Stehlé ex Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 49. 1948 (nomen nudum). TYPE: Guadeloupe. 29 SEP 1936. Stehlé & Stehlé 1233 (holotype, or LECTOTYPE designated herein: ILL; fragments of the type at NY).-- [= P. nigropunctata (fide Howard, 1973)]

stenophyllopsis Trel., Contr. U.S. Nat. Herb. 26(4): 201. 1929. TYPE: Costa Rica, Alajuela, Fraijanes. El. 1500-1700 m. 12-13 FEB 1926. Standley & Torres 47590 (holotype: US 1251248; isotype: ILL).-- [= P. angularis (fide Burger, 1971)]

stipitifolia Trel., Contr. U.S. Nat. Herb. 26(4): 220. 1929. TYPE: Costa Rica, San José, Cerro de las Vueltas. El. 2700-3000 m. DEC 1925. Standley & Valerio 44013 (holotype: US 1251184; paratype at ILL: Standley 42802).-- [= P. esperanzana Trel. (fide Burger, 1971)]

suavis Trel. (nom. invalid.) var. hondurensis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 338. 1938. TYPE: Honduras, Comayagua, near El Achote, above Siguatepeque. El. 1350 m. 15 JUL 1936. Yuncker, Dawson & Youse 5878 (holotype: ILL). -- [The specific epithet was published only in this varietal combination; = P. maculosa (fide Standley & Steyerl., 1952)]

subandina Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 98. 1936. TYPE: Peru, Junín, Pichis Trail. El. 400 m. JUN-JUL 1929. Killip & Smith 26218 (holotype: US; isotype: ILL).

subbasellaefolia Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 325, 332. 1927. TYPE: Jamaica, John Crow Peak. Nicholls 50 (holotype: US 429006; paratypes at ILL: Haiti: Ekman 1889, 3216, 3469).

subcalvescens Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 98. 1936. TYPE: Peru, Junín, Huacapistana. 6 DEC 1924. Stevens 84 (holotype: ILL; paratype at ILL: Killip & Smith 24248).

subdichotoma Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 98. 1936. TYPE: Peru, Huánuco, Muña. El. 2100 m. MAY-JUN 1923. Macbride 4008 (holotype: F 535072; isotype: ILL).

subdita Trel., Contr. U.S. Nat. Herb. 26(4): 194. 1929. TYPE: Costa Rica, Cartago, La Estrella. Cooper 192 [= Donnell Smith 5927] (holotype: US 796574; paratype at ILL: Standley 41516).-- [= P. montecristana Trel. (fide Burger, 1971)]

subgeminispica Trel. in Yuncker, Field Mus. Publ. Bot. 17: 338. 1938. TYPE: Honduras, hills above Lancetilla. El. 90 m. 11 AUG 1934. Yuncker 4987 (holotype: ILL).

subretusa Yuncker, Bol. Inst. Bot. (São Paulo) 3: 174, fig. 155. 1966. TYPE: Brazil, Rio de Janeiro. Glaziou 7836 (holotype: B; paratype at ILL: Mexia 4073).-- [This species upheld by Yuncker, 1974]

subrubescescens Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 483, fig. 425. 1950. TYPE: Colombia, Antioquia, near Guapá, etc. El. 50 m. 3 MAY 1945. Haight 4623 (holotype: US 1709179; isotype: ILL; paratypes at ILL: Haight 4783, 5508).

subsericata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 98. 1936. TYPE: Peru, Junín, Chanchamayo Valley. El. 1500-1800 m. Schunke 479 [holotype: F 571537; fragments of the type at ILL; paratypes at ILL: Killip & Smith 24815, 25513, 25547; Schunke 545 and 549 (fragments)].

subternifolia Yuncker, Bol. Inst. Bot. (São Paulo) 3: 176, fig. 156. 1966. TYPE: Brazil, Rio de Janeiro, Itatiaia. 13 JUN 1902. Dusén 586 (holotype: S; isotype: ILL; paratypes at ILL: Loefgren 3522; Mexia 4270a).-- [This species upheld by Yuncker, 1974]

subvillosa Heurck & Müll. Arg. in Heurck forma dumauseana Trel. & Stehlé in Stehlé & Quentin, Fl. Guadel. Depend. & Martinique 2(2): 61. 1948. TYPE: Martinique, Forêt de Dumausé. El. 950 m. 14 JUL 1939. Stehlé & Stehlé 3369 (holotype: ILL).-- [= P. hirtella (fide Howard, 1973)]

suizana Trel., Trab. Mus. Nac. Ci. Nat., Ser. Bot. 33: 47. 1936 (without a Latin diagnosis). TYPE: Colombia, Tolima, La Suiza. El. 2600 m. 11 MAY 1932. Cuatrecasas 2407 (holotype: MA; isotype: ILL).-- [= P. crispa Sodiro (fide Trel. & Yuncker, 1950)]

suratana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 615, fig. 539. 1950. TYPE: Colombia, Santander, Río Suratá Valley, above Suratá. El. 2000-2300 m. 5-6 JAN 1927. Killip & Smith 16615 (holotype: GH; isotype: ILL; paratypes at ILL: Fassett 25040; Killip & Smith 16564).-- [This species recognized by Yuncker, 1955a]

sympodialis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 687, fig. 602. 1950. TYPE: Colombia, Caldas, Río Santa Rita, Salento. El. 1600-1800 m. 29 JUL 1922. Killip & Hazen 8980 (holotype: US 1142745; isotype: ILL).

- * taco-tacoi Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 16, 23. 1926. TYPE: Cuba, Pinar del Río, Río Taco Taco, Sierra de los Órganos. 12 OCT 1923. Ekman 17620 (holotype, or LECTOTYPE designated herein: ILL; isotype or isolectotype: ILL).-- [= P. petiolaris C.DC. (fide Yuncker, 1950-51)]
- tafelbergensis Yuncker in Maguire and Collaborators, Bull. Torrey Bot. Club 75: 292. 1948. TYPE: Suriname, Arrowhead Basin, Tafelberg. El. 625 m. 24 AUG 1944. Maguire 27170 (holotype: NY; isotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950 and Yuncker, 1957]
- tamboana Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 498, fig. 444. 1950. TYPE: Colombia, Cauca, Río Sucio, SW of Tambo. El. 1100 m. 20 NOV 1946. Haught 5263 (holotype: ILL).
- tejana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 611, fig. 535. 1950. TYPE: Colombia, Norte de Santander, along road from Pamplona to Toledo, etc. El. 2500-2800 m. 28 FEB 1927. Killip & Smith 19910 (holotype: US 1355080; isotype: ILL; paratype at ILL: Jimenez 83).
- tenae Trel. & Yuncker, Piperaceae no. S. Amer. 2: 482, fig. 424. 1950. TYPE: Ecuador, Napo-Pastaza, near Tena. El. 400 m. 2-11 APR 1935. Mexia 7162 (holotype: US 1619108; isotype: ILL).
- tenebraegaudens Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 305. 1940. TYPE: Panama, Chiriquí, Bajo Mona, mouth of Quebrada Chiquero, along Río Caldera. El. 1500-2000 m. 3 JUL 1938. Woodson, Allen & Seibert 993 (holotype: ILL).-- [= P. maculosa (fide Burger, 1971; Trel. & Yuncker, 1950 and Yuncker, 1950)]
- teresitensis Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 100. 1936. TYPE: Peru, Junín, Teresita. 29 OCT 1924. Stevens 88 (holotype: ILL).
- terraegaudens Trel. & Yuncker, Piperaceae no. S. Amer. 2: 657, fig. 575. 1950. TYPE: Colombia, Santander, vicinity of El Roble. El. ca 1500 m. 16 FEB 1927. Killip & Smith 19383 (holotype: US 1354639; isotype: ILL).
- tetraphylla (G. Forster) Hooker & Arnott var. tetraphylla forma protractifolia Yuncker, Bol. Inst. Bot. (São Paulo) 3: 177. 1966. TYPE: Brazil, Paraná, Campina Grande do Sul. 22 JAN 1960. Hatschbach 6671 [holotype: IPB?; paratypes at ILL: Duarte s.n. (= SP 12582); Gehrt 813].-- [This taxon recognized by Yuncker, 1974]

- theodori Trel. var. glabricaulis Yuncker, Lilloa 27: 189.
[1953] 1955. TYPE: Bolivia, La Paz, N. Yungas, Polo-Polo,
near Coroico. El. 1100 m. OCT-NOV 1912. Buchtien 4560
(holotype: US 1176997; fragments of the type at ILL;
paratype at ILL: Buchtien 7244).
- ticunhuayana Trel., Bull. Torrey Bot. Club 55: 170. 1928.
TYPE: Bolivia, Cordillera Real, Ticunhuaya. El. 5000 ft.
1926. Tate 1082 (holotype: NY; fragments of the type at
ILL).-- [This species recognized by Yuncker, 1955]
- timbuchiana Trel. in J.F. Macbr., Field Mus. Publ. Bot.
13(No. 357): 100. 1936. TYPE: Peru, Loreto, Timbuchi on the
Río Nanay. JUN-JUL 1929. Williams 1163 (holotype:
F 608106; isotype: ILL).
- toroi Trel. & Yuncker, Piperaceae no. S. Amer. 2: 640, fig.
563. 1950. TYPE: Colombia, Antioquia, vicinity of Medellín.
14 NOV 1927. Toro 794 (holotype: NY; fragments of the type
at ILL).
- tortugana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23:
319, 327. 1927. TYPE: Haiti, Morne Barranca, Ile la Tortue.
El. 300 m. 24 MAY 1925. Ekman 4111 (holotype: ?; isotype:
ILL).
- tovariana C.DC. in DC. var. subcaespitosa Trel. & Yuncker,
Piperaceae no. S. Amer. 2: 709, fig. 632. 1950. TYPE:
Colombia, Santa Marta, Sierra del Líbano. El. 1800 m.
H.H. Smith 1911 (holotype: NY; paratype at ILL: Archer
1274).
- translucens Trel. in Standley, Field Mus. Publ. Bot. 18: 328.
1937. TYPE: Costa Rica, Limón, Finca Castilla. El. 30 m.
Dodge & Goerger 9292 [holotype: MO; isotype (small piece):
ILL].-- [= P. pellucida (fide Burger, 1971)]
- trapezoidalis Yuncker, Lilloa 27: 202, tab. 80. [1953] 1955.
TYPE: Argentina, San Javier, Acaragua. El. 200 m.
30 JAN 1947. Berboin 2339 (holotype: LIL 179605; paratypes
at ILL: Claren 11778; Ekman 1237).
- treleasei Yuncker, Bernice P. Bishop Mus. Bull. 112: 46. 1933.
TYPE: Hawaii, Molokai, Pukoo. Forbes 274-MO [holotype:
BISH; paratypes at ILL: Degener & Wiebke 2843 (2 sheets),
2873].-- [This species recognized by Kartesz & Kartesz,
1980]

tremulaeformis Trel. in Yuncker, Field Mus. Publ. Bot. 9: 276. 1940. TYPE: Honduras, Atlántida, Río Danto, slopes of Mt. Cangrejal. 30 JUL 1938. Yuncker, Koepper & Wagner 8722 (holotype: ILL).-- [= P. major (Miq.) C.DC. (fide Standley & Steyerl., 1952); = P. urocarpa (cf. Yuncker, 1950-51 and 1974)]

tressis Trel. in Yuncker, Field Mus. Publ. Bot. 17: 339. 1938. TYPE: Honduras, Comayagua, near El Achote, above Siguatepeque. El. 1350 m. 21 JUL 1936. Yuncker, Dawson & Youse 6001 (holotype: ILL).-- [= P. collocata (fide Standley & Steyerl., 1952)]

trichopus Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 101. 1936. TYPE: Peru, Huánuco, Piedra Grande near Río Santo Domingo. El. 1500 m. 14-19 MAY 1923. Macbride 3855 (holotype: F 534918; isotype: ILL).-- [This species recognized by Trel. & Yuncker, 1950]

tricolor Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 101. 1936. TYPE: Peru, Junín, Pichis Trail, San Nicolás. El. 1100 m. 4-5 JUL 1929. Killip & Smith 25973 (holotype: US; isotype: ILL).

trinervula C.DC. in DC. var. suboppositifolia Trel. & Yuncker, Piperaceae no. S. Amer. 2: 648. 1950. TYPE: Colombia, Cauca, Cordillera Central, headwaters of the Río Palo, Quebrada de Santo Domingo. El. 2700-2800 m. 13 DEC 1944. Cuatrecasas 19197 (holotype: US 1854385; isotype: ILL).-- [This variety recognized by Yuncker, 1955a]

trineuroides Dahlst., Kongl. Svenska Vetenskapsakad. Handl. 33(2): 198, tab. 8, fig. 2. 1900. TYPE: Brazil, Rio Grande do Sul, São Angelo prope Cachoeira. 4 FEB 1893. Malme 538 (holotype: S; isotype: ILL).-- [This species recognized by Yuncker, 1974]

trullaefolia Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 102. 1936. TYPE: Peru, Cuzco, Ollantaitambo. El. 3000 m. 27 APR 1915. Cook & Gilbert 401 (holotype: US; fragments of the type at ILL).

trumani Trel. in Yuncker, Field Mus. Publ. Bot. 17: 339. 1938. TYPE: Honduras, Cortés, Lake Yojoa. El. 630 m. 30 JUL 1934. Yuncker 4847 (holotype: ILL).

truncata Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 322, 330. 1927. TYPE: Haiti, Mission Fonds Verettes. Leonard 3831 (holotype: US 1076201; paratypes at ILL: Ekman 2509, 3005; Leonard 8307).

- turboensis Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 463, fig. 405. 1950. TYPE: Colombia, Antioquia, Guapá, 53 km S of Turbo. El. ca 40 m. 23 APR 1945. Haught 4595 (holotype: US 1709164; isotype: ILL).
- turquinana Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 20, 28. 1926. TYPE: Cuba, Oriente, Sierra Maestra, top of Pico Turquino. El. 2040 m. 22-24 JUL 1922. Ekman 14530 (holotype: ?; isotype: ILL).-- [= P. maxonii C.DC. in Urban (fide Yuncker, 1950-51)]
- tutunendoana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 660, fig. 577. 1950. TYPE: Colombia, Chocó, Tutunendo, 20 km N of Quibdó. El. ca 80 m. 19, 20 MAY 1931. Archer 2157 (holotype: US 1519171; isotype: ILL; paratype at ILL: Antonio Camilo 74).
- tyleri Trel. in Gleason, Bull. Torrey Bot. Club 58: 355. 1931. TYPE: Venezuela, summit of Mt. Duida, valley beyond Ridge 23B. El. 5950 ft. Tate 476 (holotype: NY; fragments of the type at ILL).-- [This species recognized by Trel. & Yuncker, 1950 and Yuncker, 1974]
- udimontana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 747, fig. 671. 1950. TYPE: Ecuador, Napo-Pastaza, between Puyo and Canelos. El. 325-375 m. 1-3 FEB 1935. Mexia 6830 (holotype: US 1619084; isotype: ILL).
- umbellifera Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 586, fig. 509. 1950. TYPE: Colombia, Cauca, Quebrada Manchal, NE of Silvia. El. 3100 m. 22 OCT 1946. Haught 5125 (holotype: US 1709492; paratype at ILL: Cuatrecasas 19244).
- unguiculata Trel. in Feddes Repert. Spec. Nov. Regni. Veg. 23: 325, 332. 1927. TYPE: Haiti, Mission Fonds Verettes. Leonard 3800 (holotype: US 1076231; paratype at ILL: Ekman 3145).
- urbani Trel. in Feddes Repert. Spec. Nov. Regni Veg. 23: 18, 27. 1926. TYPE: Cuba, Oriente, Guantánamo, Monte Libanon. El. 700-800 m. 28 NOV 1922. Ekman 15826 (holotype: ?; isotype: ILL).-- [This species recognized by Yuncker, 1950-51]
- vallensis Trel. & Yuncker, Piperaceae no. S. Amer. 2: 615, fig. 538. 1950. TYPE: Colombia, El Valle, Río Digua Valley, between La Elsa and Río Blanco. El. 640 m. 2-5 APR 1939. Killip 34786 (holotype: US 1771578; isotype: ILL).

- valliculae Trel. in Woodson & Seibert, Ann. Missouri Bot. Gard. 24: 186. 1937. TYPE: Panama, Coclé, w. slope and summit of Cerro Valle Chiquito. El. 700-800 m. 25 JUL 1935. Seibert 503 (holotype: MO; isotype: ILL).-- [This species recognized by Yuncker, 1950]
- variculata Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 103. 1936. TYPE: Peru, Junín, Chahuapanas. El. 340 m. 20, 21 JUL 1929. Killip & Smith 26792 (holotype: US; isotype: ILL).
- veneciana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 545, fig. 475. 1950. TYPE: Colombia, Cundinamarca, Venecia-Pandi. JUL 1930. Herb. Nac. Colombiano 601 (holotype: US 1471102; paratype at ILL: Laureano Javier 4).
- venezueliana C.DC. var. aterrima Trel. & Yuncker, Piperaceae no. S. Amer. 2: 598. 1950. TYPE: Colombia, Santander, Río Suratá Valley, near Suratá. El. 2000-2300 m. 5-6 JAN 1927. Killip & Smith 16655 (holotype: GH; isotype: ILL).
- venosa Yuncker in Trel. & Yuncker, Piperaceae no. S. Amer. 2: 463, fig. 406. 1950. TYPE: Colombia, El Valle, Los Farallones, etc. El. 2600-2870 m. 13 OCT 1944. Cuatrecasas 18123 [holotype: US 1854251; probable isotype: ILL (as No. 18125)].
- ventricosicarpa Trel. in J.F. Macbr., Field Mus. Publ. Bot. 13(No. 357): 104. 1936. TYPE: Peru, Loreto, Soledad on Río Itaya. El. 110 m. 20-22 SEP 1929. Killip & Smith 29800 (holotype: US; isotype: ILL).
- versicolor Trel., Contr. U.S. Nat. Herb. 26(4): 200. 1929. TYPE: Costa Rica, Cartago, vicinity of Pejivalle. El. 900 m. 7-8 FEB 1926. Standley & Valerio 47270 (holotype: US 1251235; isotype: ILL).-- [= P. alata (fide Burger, 1971)]
- verticillatispica Trel. & Yuncker, Piperaceae no. S. Amer. 2: 745, fig. 669. 1950. TYPE: Ecuador, Pichincha, between Quito and Santo Domingo. El. 1200 m. 4 APR 1942. Haught 3217 (holotype: US 1707985; isotype: ILL).-- [This species recognized by Yuncker, 1955a]
- wagneri Trel. in Yuncker, Field Mus. Publ. Bot. 9: 276. 1940. TYPE: Honduras, Yoro, Coyoles. 29 JUN 1938. Yuncker, Koepper & Wagner 8127 (holotype: ILL; paratype at ILL: Yuncker, Koepper & Wagner 8055).-- [= P. crassiuscula (fide Standley & Steyer., 1952); = P. pereskiaefolia (fide Burger, 1971)]

- * wilsonii Stehlé, *Candollea* 8: 78. 1940. TYPE: Guadeloupe, mangrove de Pointe-à-Pitre au Gosier. El. 5 m. Stehlé & Stehlé 2545 (LECTOTYPE, designated herein: NY; isolectotype: ILL).-- [= P. nigropunctata (fide Howard, 1973)]
- woodsonii Trel. in Woodson & Schery, *Ann. Missouri Bot. Gard.* 27: 305. 1940. TYPE: Panama, Chiriquí, vicinity of Casita Alta, Volcán de Chiriquí. El. 1500-2000 m. JUN-JUL 1938. Woodson, Allen & Seibert 933 (holotype: ILL).-- [= P. hispidula (fide Burger, 1971; Trel. & Yuncker, 1950; Yuncker, 1950 and 1955)]
- yananoensis Trel. in J.F. Macbr., *Field Mus. Publ. Bot.* 13(No. 357): 106. 1936. TYPE: Peru, Huánuco, Yanano. El. 1800 m. 13-16 MAY 1923. Macbride 3741 (holotype: F 534803; isotype: ILL).
- yananoensis var. caniana Trel. in J.F. Macbr., *Field Mus. Publ. Bot.* 13(No. 357): 106. 1936. TYPE: Peru, Huánuco, Cani near Mito. El. 2550 m. 16-26 APR 1923. Macbride 3460 (holotype: F; isotype: ILL).
- * yaquena Trel. in Feddes *Repert. Spec. Nov. Regni Veg.* 29: 28. 1931. TYPE: Santo Domingo [Dominican Republ.], Azua, Valle del Yaque. El. 1500 m. 6 OCT 1929. Ekman 13689 (holotype, or LECTOTYPE designated herein: ILL).
- yapasana Trel. in J.F. Macbr., *Field Mus. Publ. Bot.* 13(No. 357): 106. 1936. TYPE: Peru, Junín, Pichis Trail. El. 1350-1600 m. 28-29 JUN 1929. Killip & Smith 25478 (holotype: US; isotype: ILL).
- yeracuiana Trel. & Yuncker, *Piperaceae no. S. Amer.* 2: 722, fig. 645. 1950. TYPE: Colombia, Chocó, Corcovada Region, upper Río San Juan, ridge along Yeracú Valley. El. 200-275 m. 24, 25 APR 1939. Killip 35301 (holotype: US 1772036; isotype: ILL).
- yojoana Trel. in Yuncker, *Field Mus. Publ. Bot.* 17: 339. 1938. TYPE: Honduras, Cortés, Lake Yojoa. El. 630 m. 31 JUL 1934. Yuncker 4913 (holotype: ILL; paratypes at ILL: Yuncker 4823, 4902).
- yousei Trel. in Yuncker, *Field Mus. Publ. Bot.* 17: 339. 1938. TYPE: Honduras, Comayagua, near El Achote, above Siguatepeque. El. 1350 m. 21 JUL 1936. Yuncker, Dawson & Youse 5995 (holotype: ILL; paratype at ILL: Yuncker, Dawson & Youse 6134).-- [= P. obtusifolia (fide Standley & Steyerl., 1952)]

yunckeri Trel. in Yuncker, Field Mus. Publ. Bot. 17: 340. 1938.

TYPE: Honduras, Comayagua, in wet soil along bank of a stream, 5 km NW of Siguatepeque. El. 1100 m. 9 AUG 1936. Yuncker, Dawson & Youse 6392 (holotype: ILL).-- [Standley & Steyerf., 1952, placed the name in synonymy under P. obtusifolia, a disposition not supported by the specimen at hand]

zarzalana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 642, fig.

565. 1950. TYPE: Colombia, El Valle, Cauca Valley, 2-3 km E of Zarzal. El. 970-1050 m. 21 JUL 1922. Pennell, Killip & Hazen 8440 [holotype: US 1142584; isotype: ILL; paratypes at ILL: Arbeláez & Cuatrecasas 5648; Killip 5392b; Killip & Cuatrecasas 38411; Killip & Smith 16259; Juzepczuk 5333 (fragments); Lehmann 8482 (fragments); Silvano Jorge & Carlos 155, 164, 165, 166, 167 and 234].

zipaquirana Trel. & Yuncker, Piperaceae no. S. Amer. 2: 561,

fig. 489. 1950. TYPE: Colombia, Cundinamarca, S of Zipaquira. El. 2700-2900 m. 20-24 OCT 1917. Pennell 2625 (holotype: US 1042373; paratype at ILL: Jiménez 43).

Piper

albopunctulatissimum Trel. in Woodson & Schery, Ann. Missouri

Bot. Gard. 27: 287. 1940. TYPE: Panama, Coclé, north rim of El Valle de Antón. El. 600-1000 m. 12 FEB 1939. Allen 1652 (holotype: ILL).-- [This species recognized by Yuncker, 1950]

frostii Trel. ex Standley, Contr. Arnold Arbor. 5: 54. 1933

(nomen subnudum). TYPE: Panama, Canal Zone, Barro Colorado Island. Syntypes (perhaps lectotypification needed): Bailey 495; Frost 42, 165 (Bailey 495 at ILL).-- [= P. aequale Vahl (fide Yuncker, 1950)]

gatunense Trel. var. cocleanum Trel. in Woodson & Schery, Ann.

Missouri Bot. Gard. 27: 292. 1940. TYPE: Panama, Coclé, north rim of El Valle de Antón. El. 600-1000 m. 14 MAY 1939. Allen 1784 (holotype: ILL).-- [= P. augustum Rudge var. cocleanum (Trel.) Yuncker (1950)]

gatunense var. latum Trel. in Woodson & Schery, Ann. Missouri

Bot. Gard. 27: 292. 1940. TYPE: Panama, Coclé, north rim of El Valle de Antón. El. 600-1000 m. 21 MAY 1939. Allen 1808 (holotype: ILL).-- [= P. augustum var. cocleanum (fide Yuncker, 1950)]

- muelleri C.DC. in DC., Prodrum 16(1): 243. 1869. TYPE: Mexico, Orizaba. F. Mueller 180 [holotype: BR; fragment of the type (one leaf) at ILL].-- [This is the TYPE SPECIES of Arctotonia Trel., Proc. Amer. Philos. Soc. 69: 315. 1930, but the combination of A. muelleri (C.DC.) Trel. was not explicitly published; the species was retained under Piper (as above) by Bornstein, 1985 annotation]
- seducentifolium Trel. in Woodson & Schery, Ann. Missouri Bot. Gard. 27: 297. 1940. TYPE: Panama, Prov. Panamá, near Arraiján. El. 15 m. 22 JUN 1938. Woodson, Allen & Seibert 781 (holotype: ILL).-- [= P. acutissimum Trel. (fide Yuncker, 1950); = P. arieianum C.DC. (cf. Burger, 1971 and Croat, 1978)]
- * sinuatispicum Trel. in Feddes Repert. Spec. Nov. Regni Veg. 26: 342. 1929. TYPE: Haiti, La Hotte, Les Roseaux. El. 1300 m. 28 JUN 1928. Ekman 10166 (holotype, or LECTOTYPE designated herein: ILL).
- tatei Trel., Amer. J. Bot. 8: 215. 1921. TYPE: Nicaragua, "presumably from Chontales." 1867-68. Tate 367 [holotype: K; fragment (flowers) and an excellent tracing of the type at ILL].-- [= P. yucatanense C.DC. (fide Bornstein, 1985 annotation)]

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